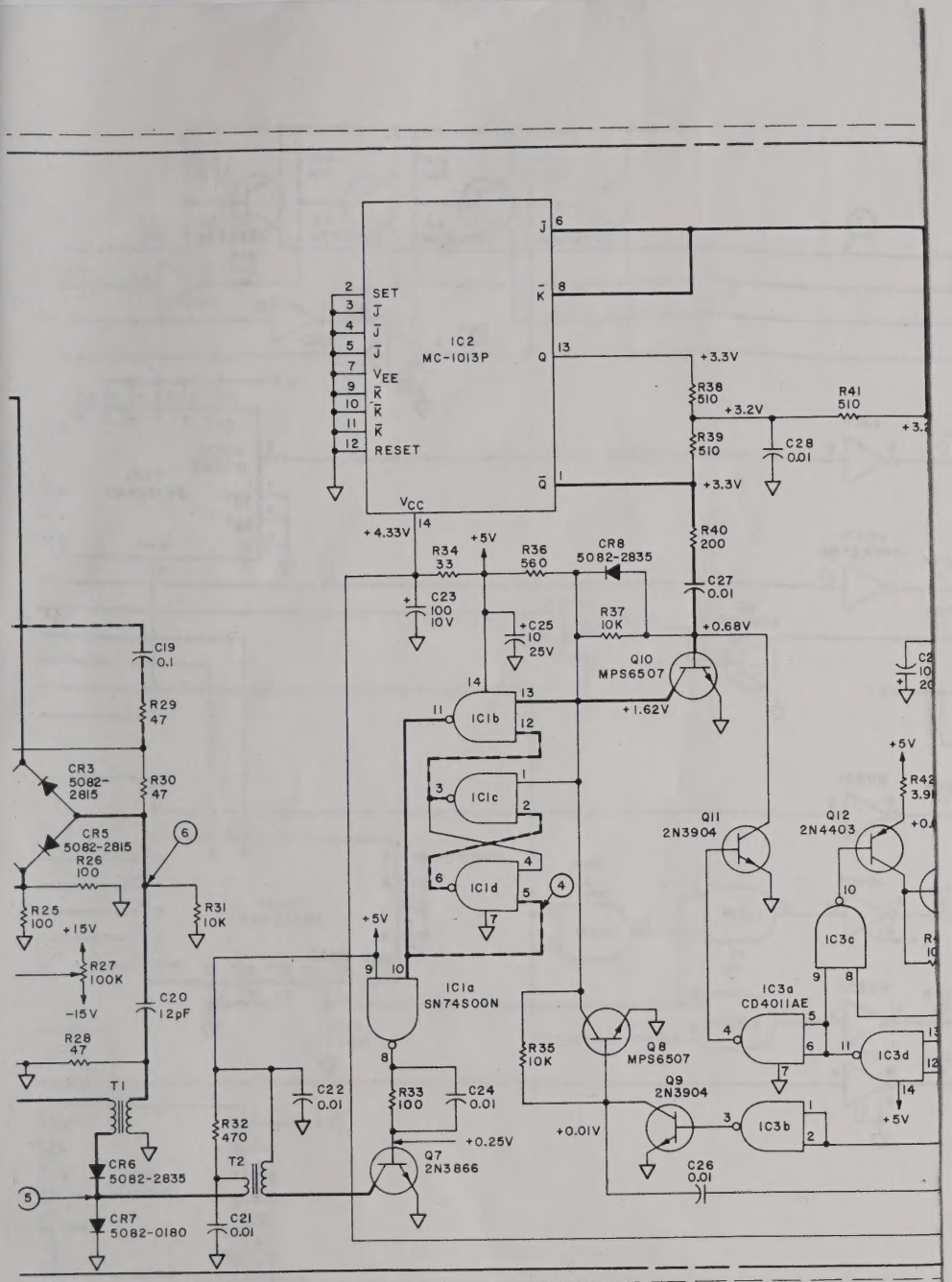
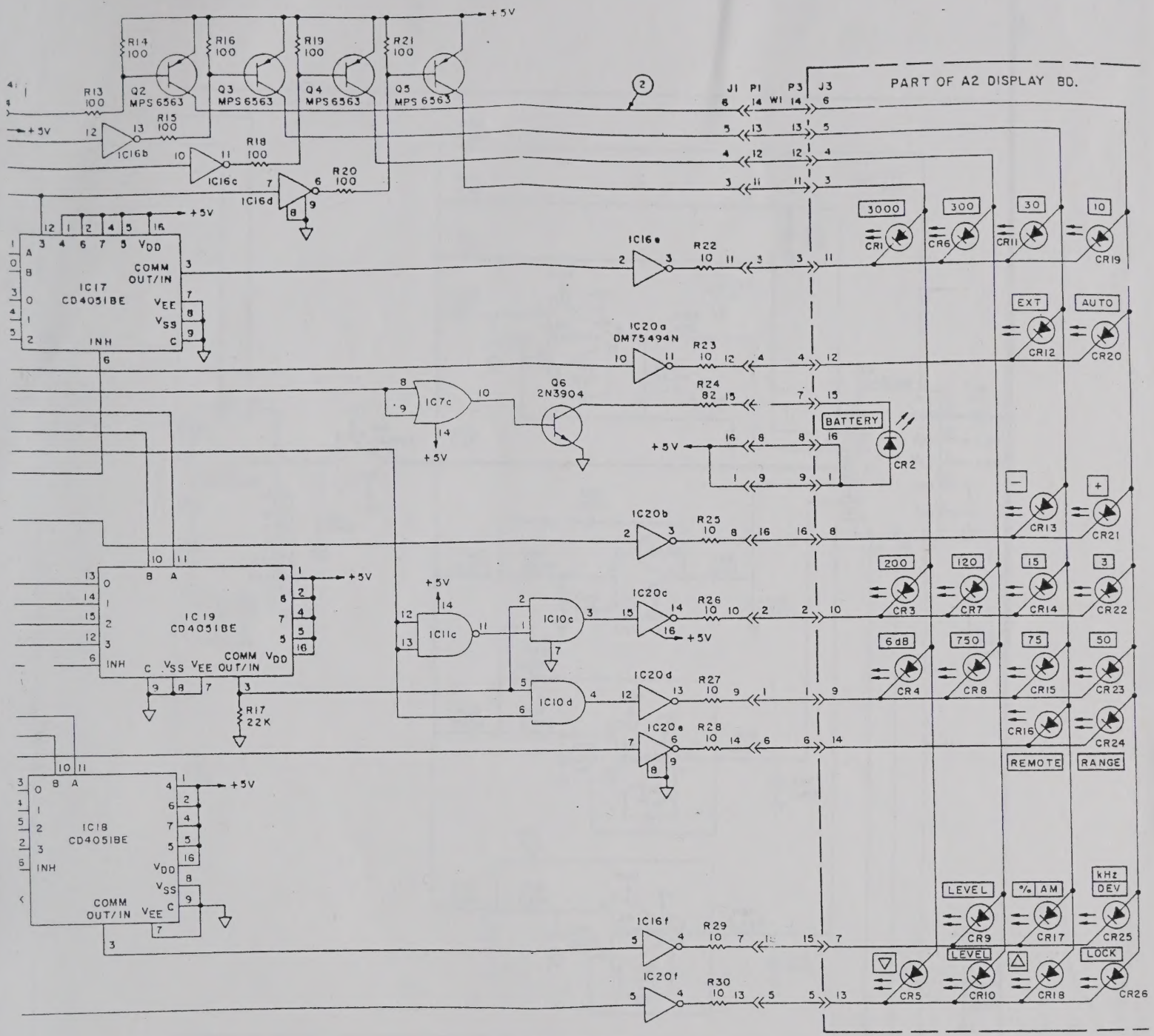

IC2
MC-1013P
SET
RESET
VEE
VCC
+4.33V
+3.3V
+3.2V
+5V
+0.68V
+1.62V
+0.01V
+0.25V
R34 33
R36 560
R37 10K
R38 510
R39 510
R40 200
R41 510
C23 100 10V
C25 10 25V
C27 0.01
C28 0.01
CR8 5082-2835
Q10 MPS6507
IC1a SN74S00N
IC1b
IC1c
IC1d
Q11 2N3904
Q12 2N4403
IC3a CD4011AE
IC3b
IC3c
IC3d
Q8 MPS6507
Q9 2N3904
Q7 2N3866
R35 10K
R33 100
C24 0.01
C26 0.01
C22 0.01
C21 0.01
R32 470
T1
T2
CR6 5082-2835
CR7 5082-0180
C19 0.1
R29 47
CR3 5082-2815
R30 47
CR5 5082-2815
R26 100
R25 100
R31 10K
+15V
R27 100K
-15V
C20 12pF
R28 47

Fig 4-2
2/3



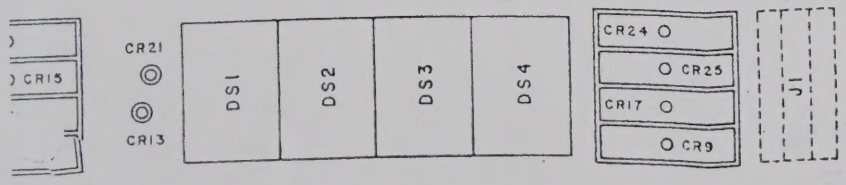
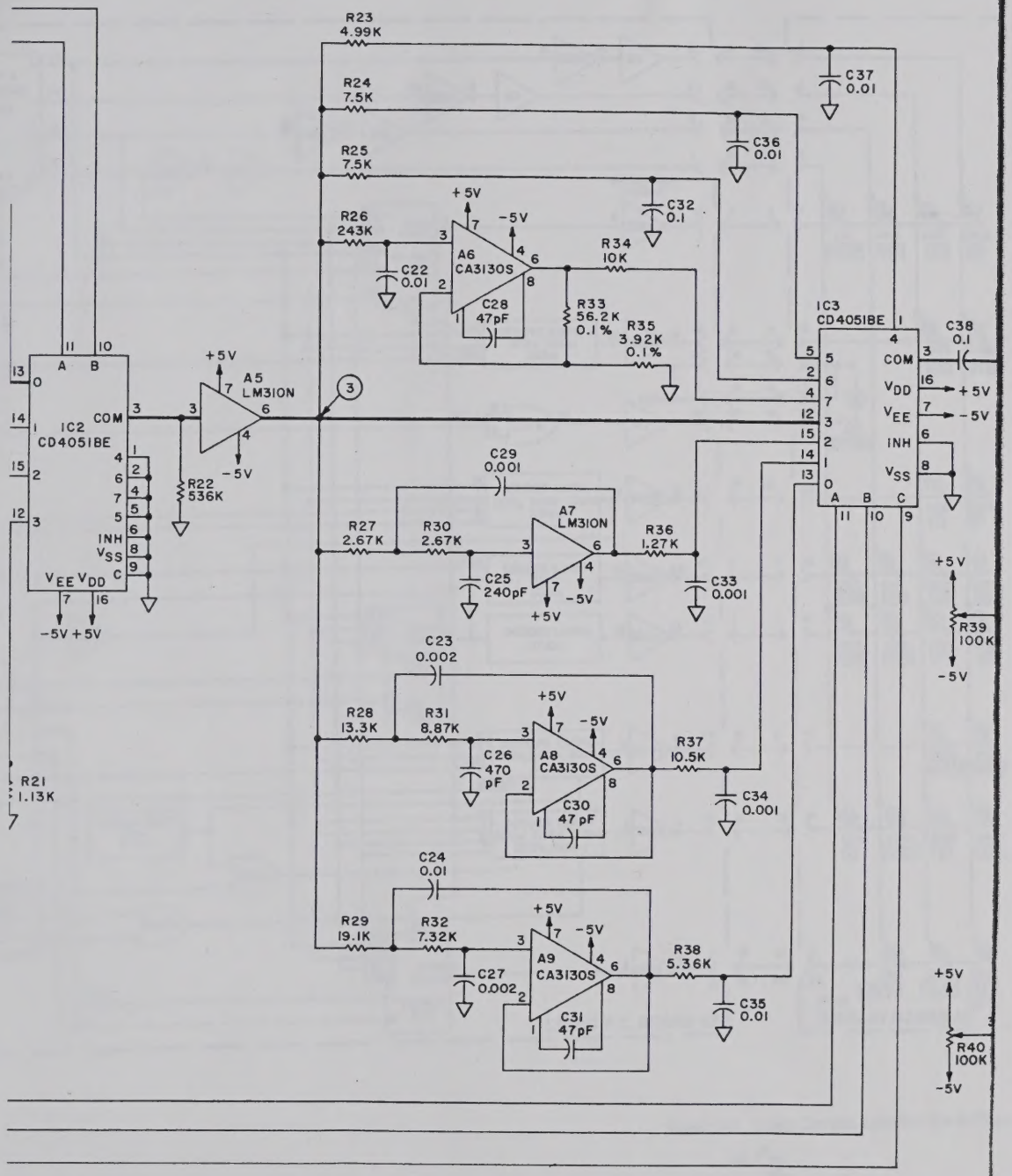
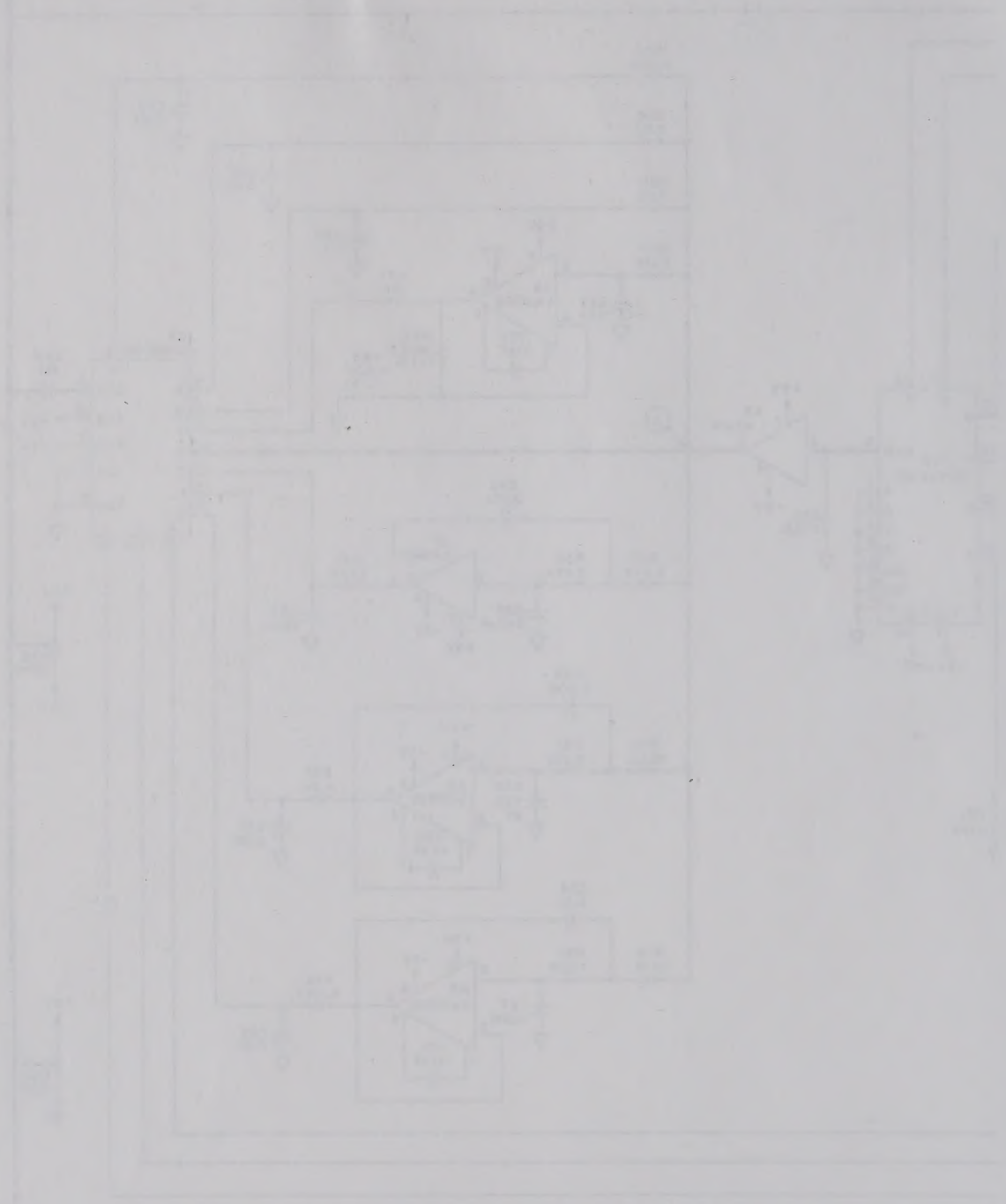


Figure 6-5 Logic Printed Circuit Board A Schematic Diagram

2/2


R23
4.99K
R24
7.5K
R25
7.5K
R26
243K
R34
10K
R33
56.2K
0.1%
R35
3.92K
0.1%
R22
536K
R27
2.67K
R30
2.67K
R36
1.27K
R28
13.3K
R31
8.87K
R37
10.5K
R29
19.1K
R32
7.32K
R38
5.36K
R21
1.13K
R39
100K
R40
100K
C22
0.01
C28
47pF
C32
0.1
C36
0.01
C37
0.01
C38
0.1
C29
0.001
C25
240pF
C33
0.001
C23
0.002
C26
470
pF
C30
47 pF
C34
0.001
C24
0.01
C27
0.002
C31
47pF
C35
0.01
A5
LM310N
A6
CA3130S
A7
LM310N
A8
CA3130S
A9
CA3130S
IC2
CD4051BE
IC3
CD4051BE
+5V
-5V
COM
INH
VSS
VEE
VDD
A
B
C

6-7
2/3



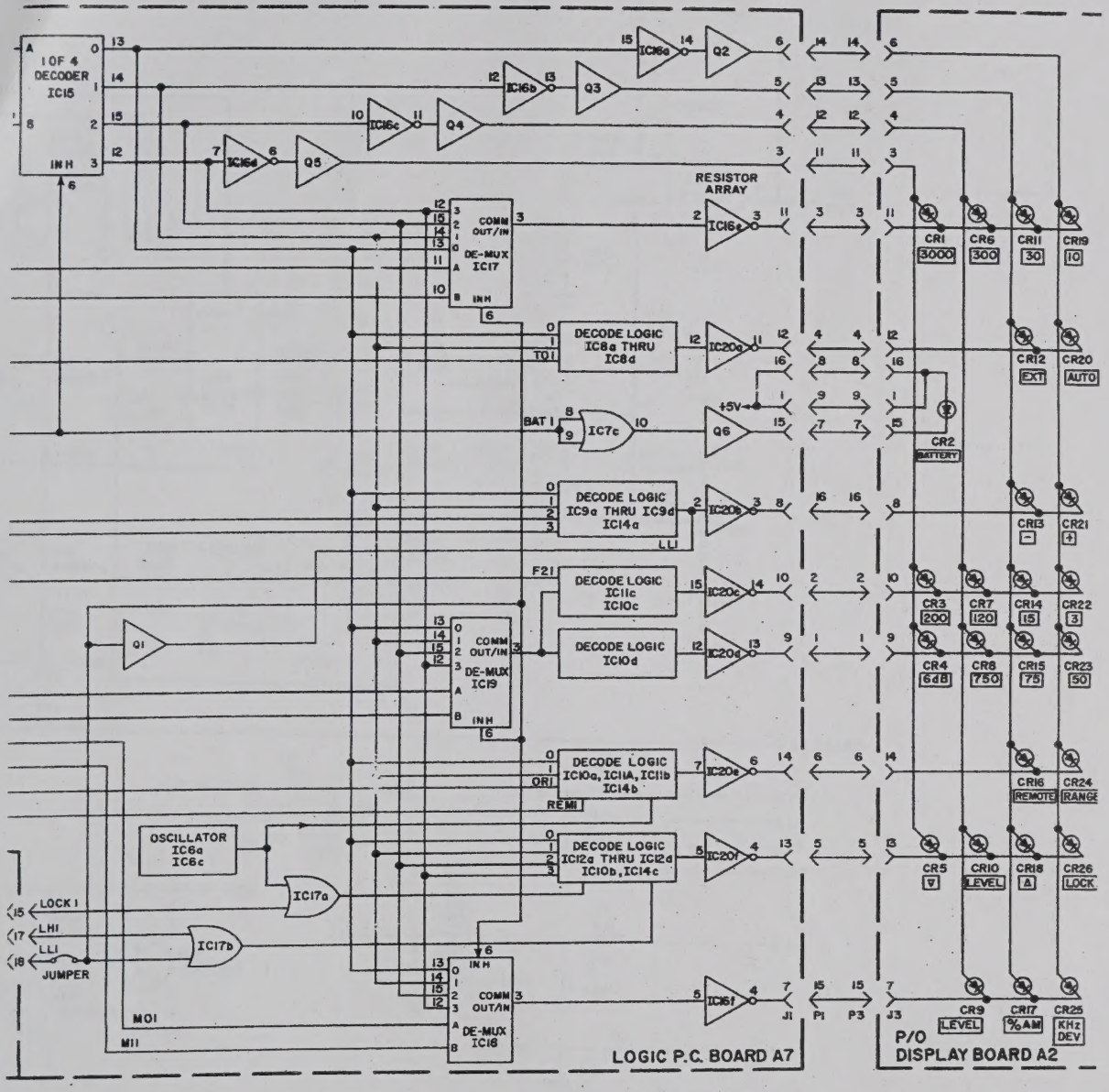


Figure 3-9 Logic Circuits, Detailed Block Diagr

2/2

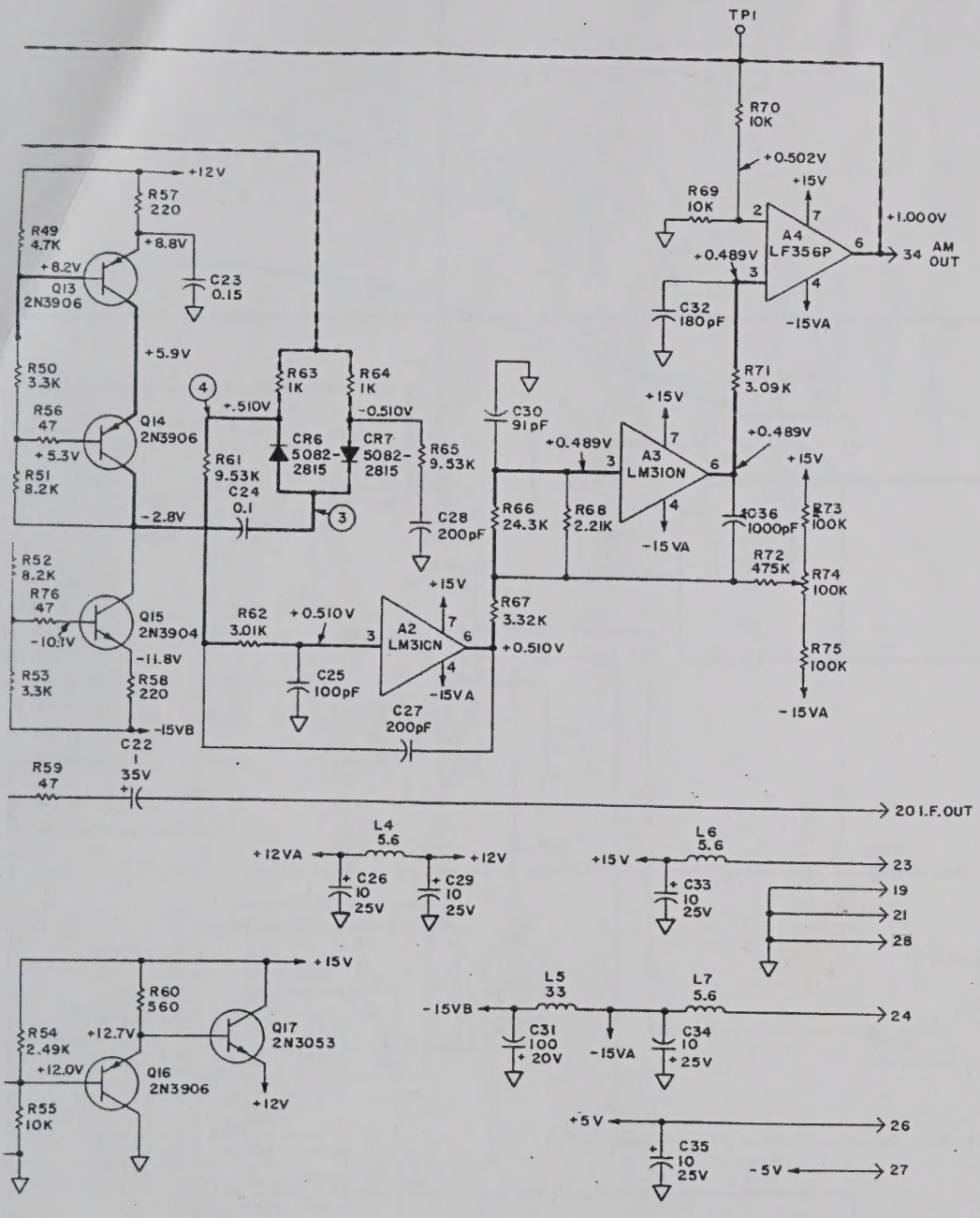


Figure 6-9 · AM Printed Circuit Board A11, Schematic Diagram

MASTER

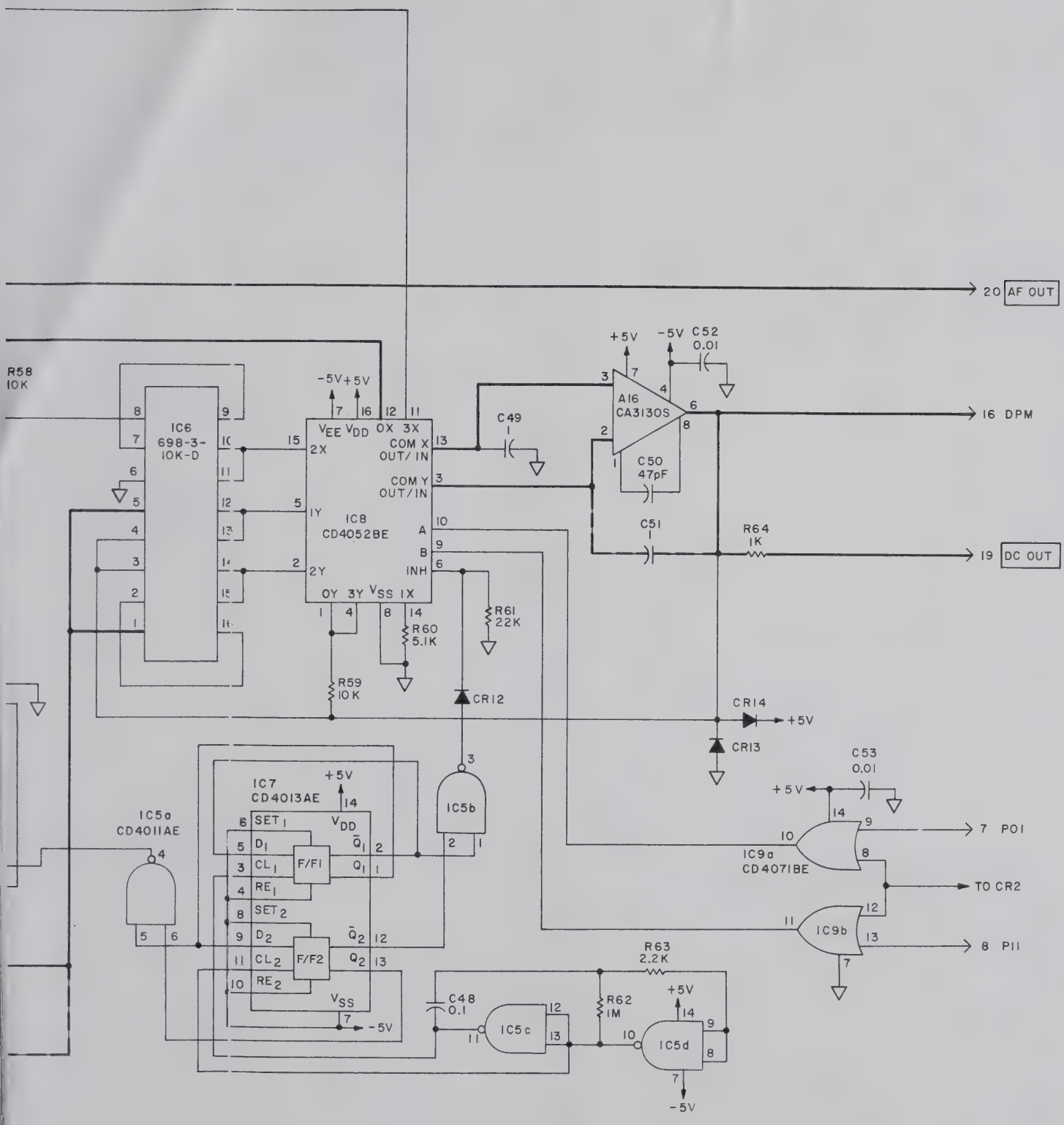


Figure 6-7 Audio Printed Circuit Board A9, Schematic Diagram

3/3

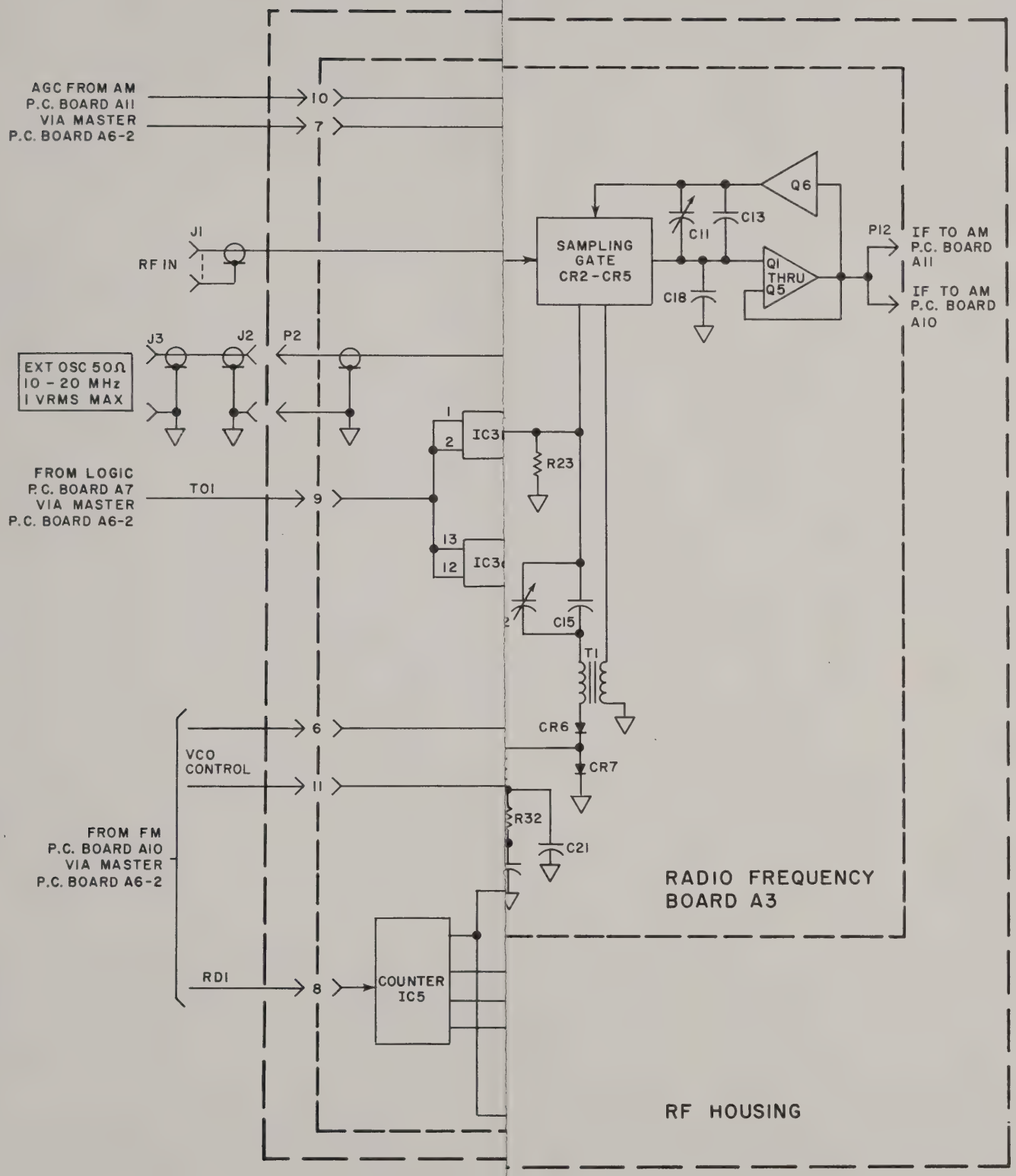


Figure 3-2 Radio Frequency Circuits, Detailed Block Diagram

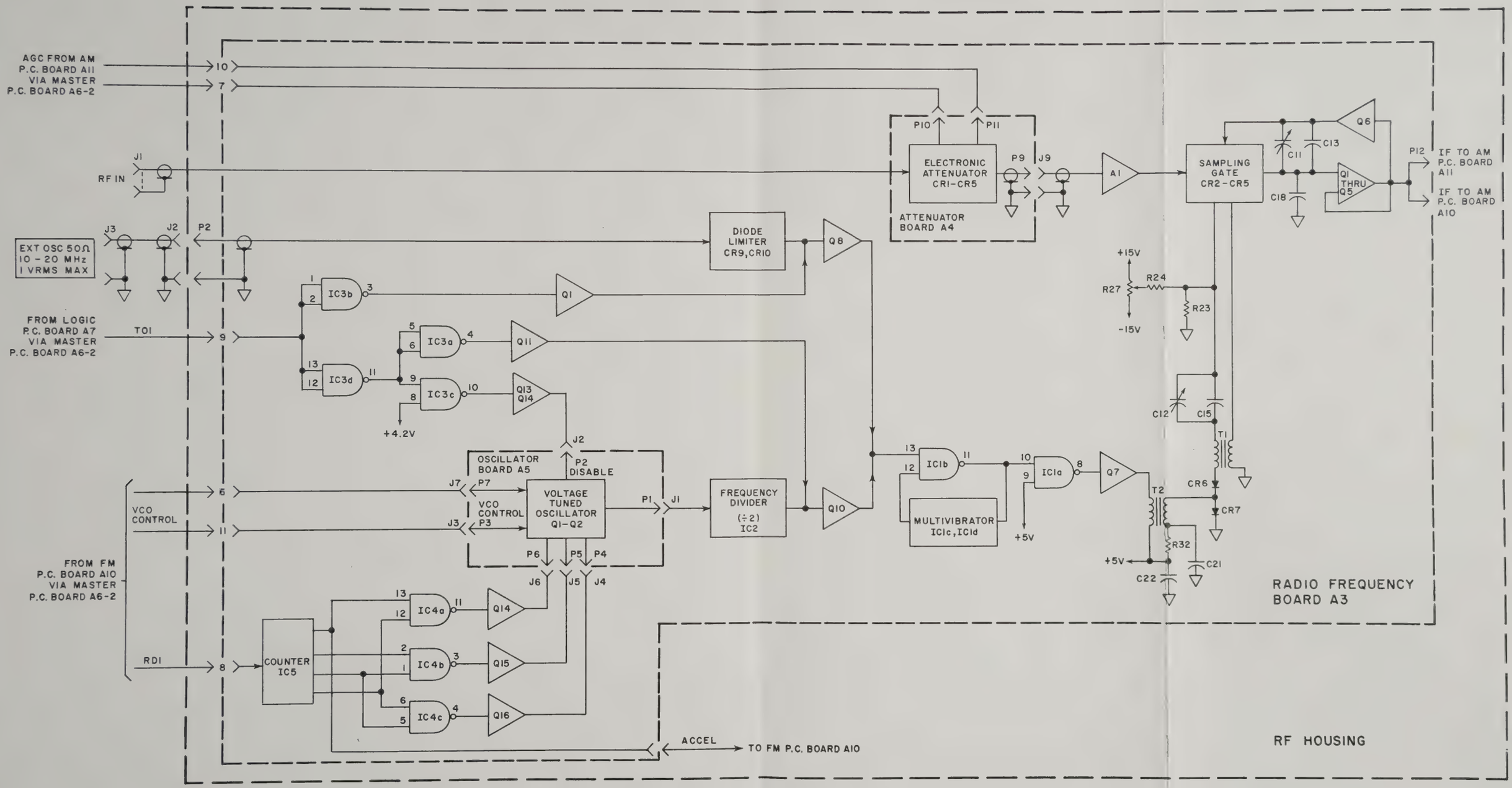


Figure 3-2 Radio Frequency Circuits, Detailed Block Diagram

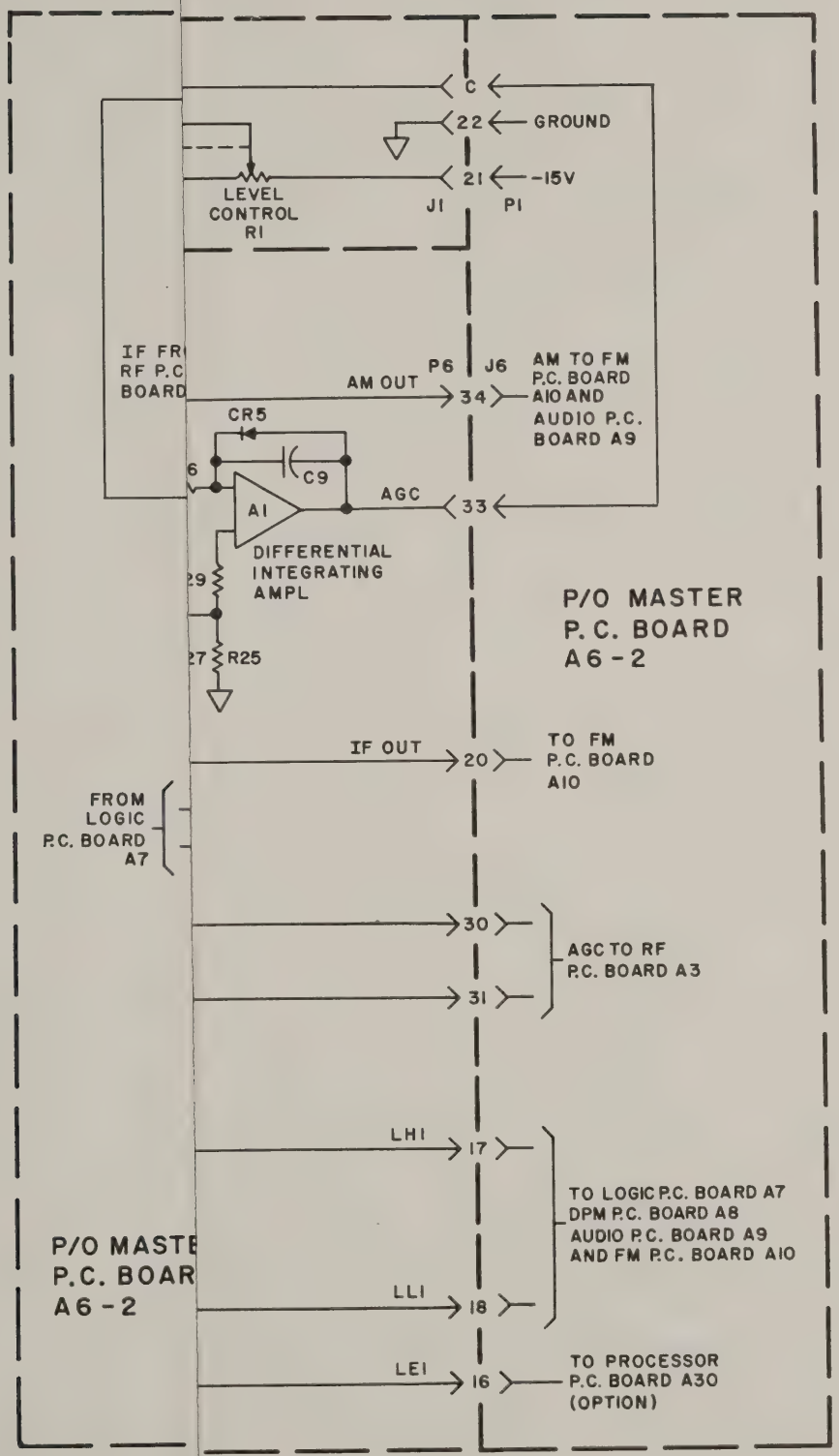


Figure 3-4 Amplitude Modulation Circuits, Detailed Block Diagram

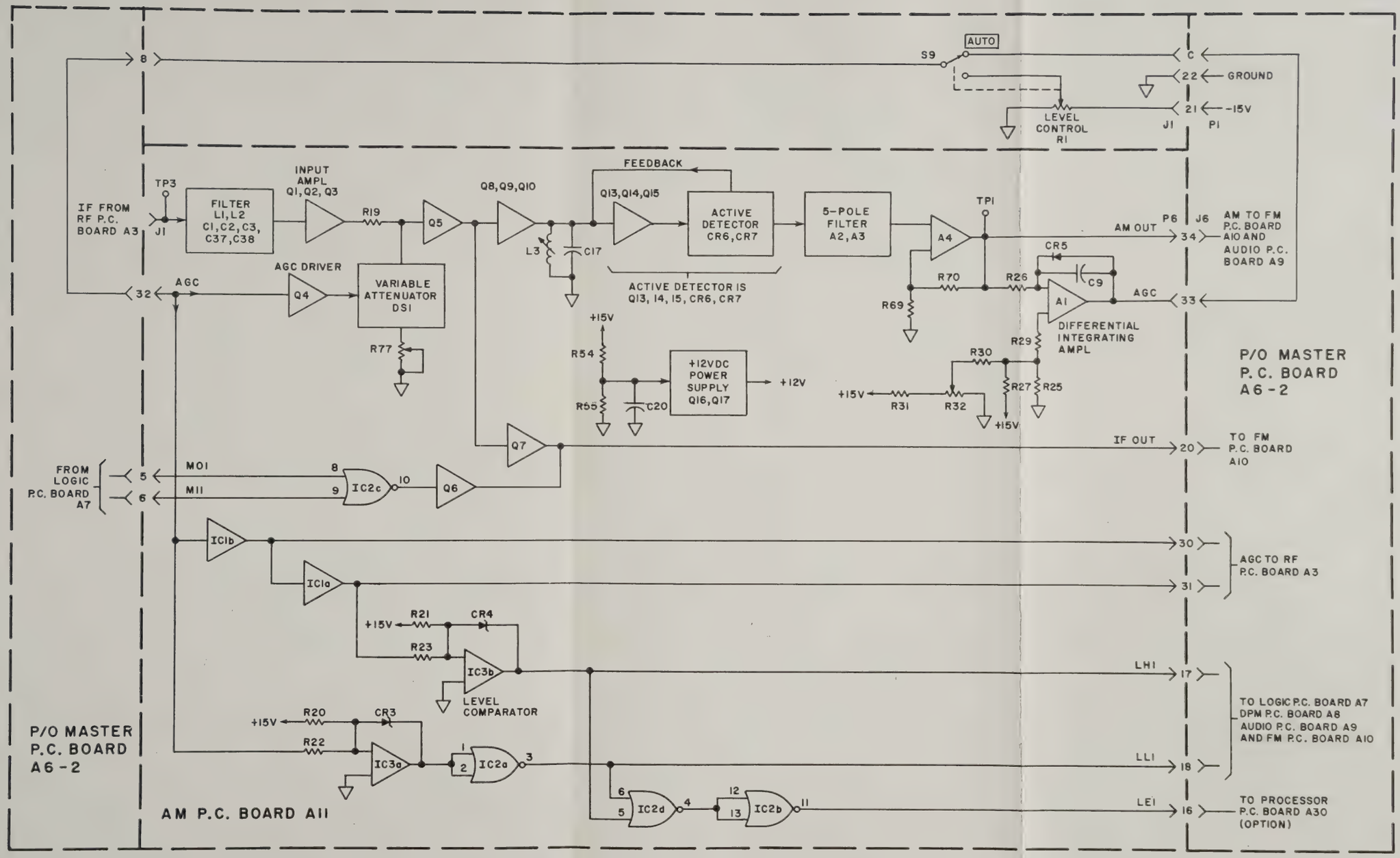


Figure 3-4 Amplitude Modulation Circuits, Detailed Block Diagram

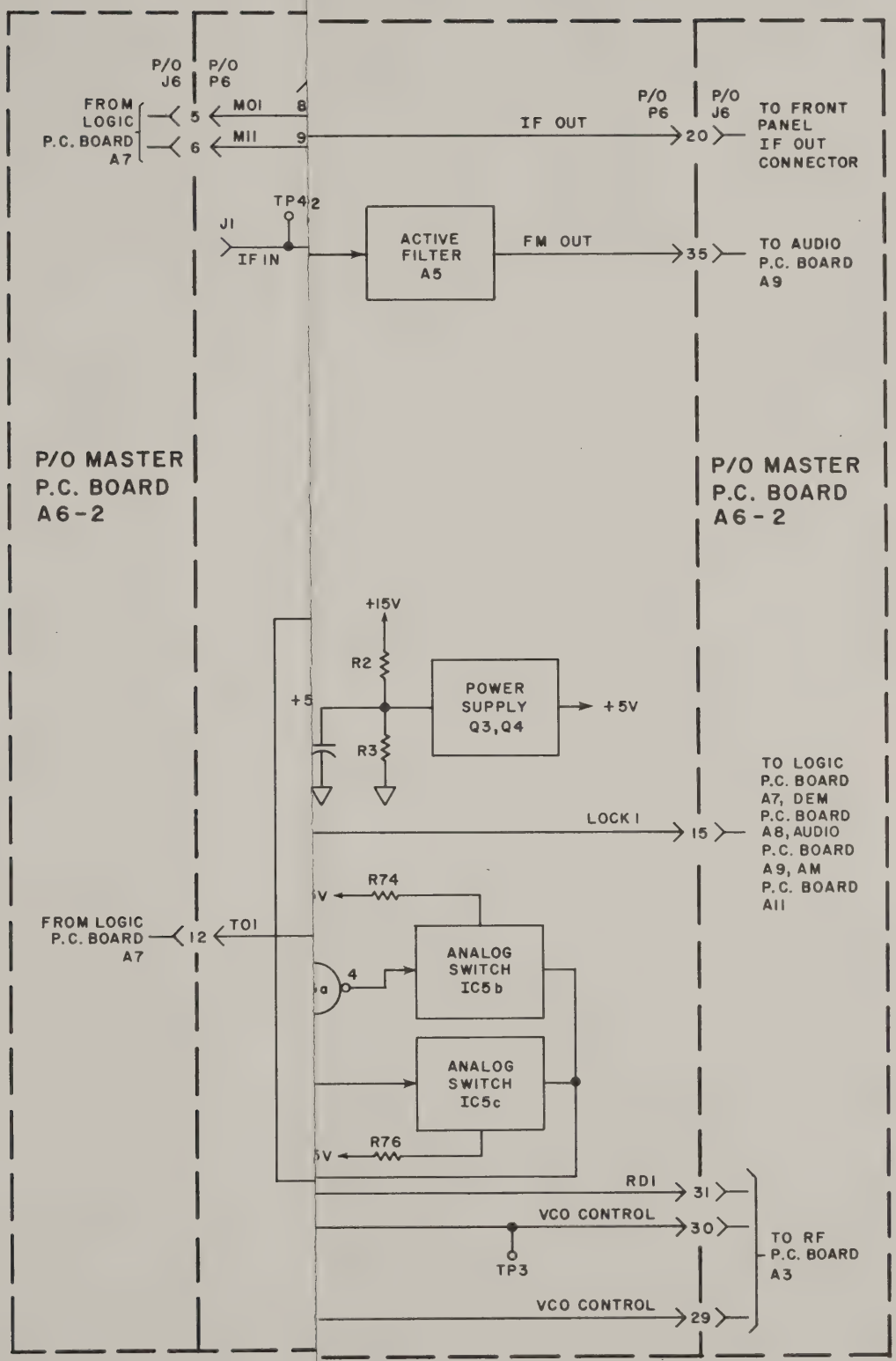


Figure 3-5 Frequency Modulation Circuits, Detailed Block Diagram

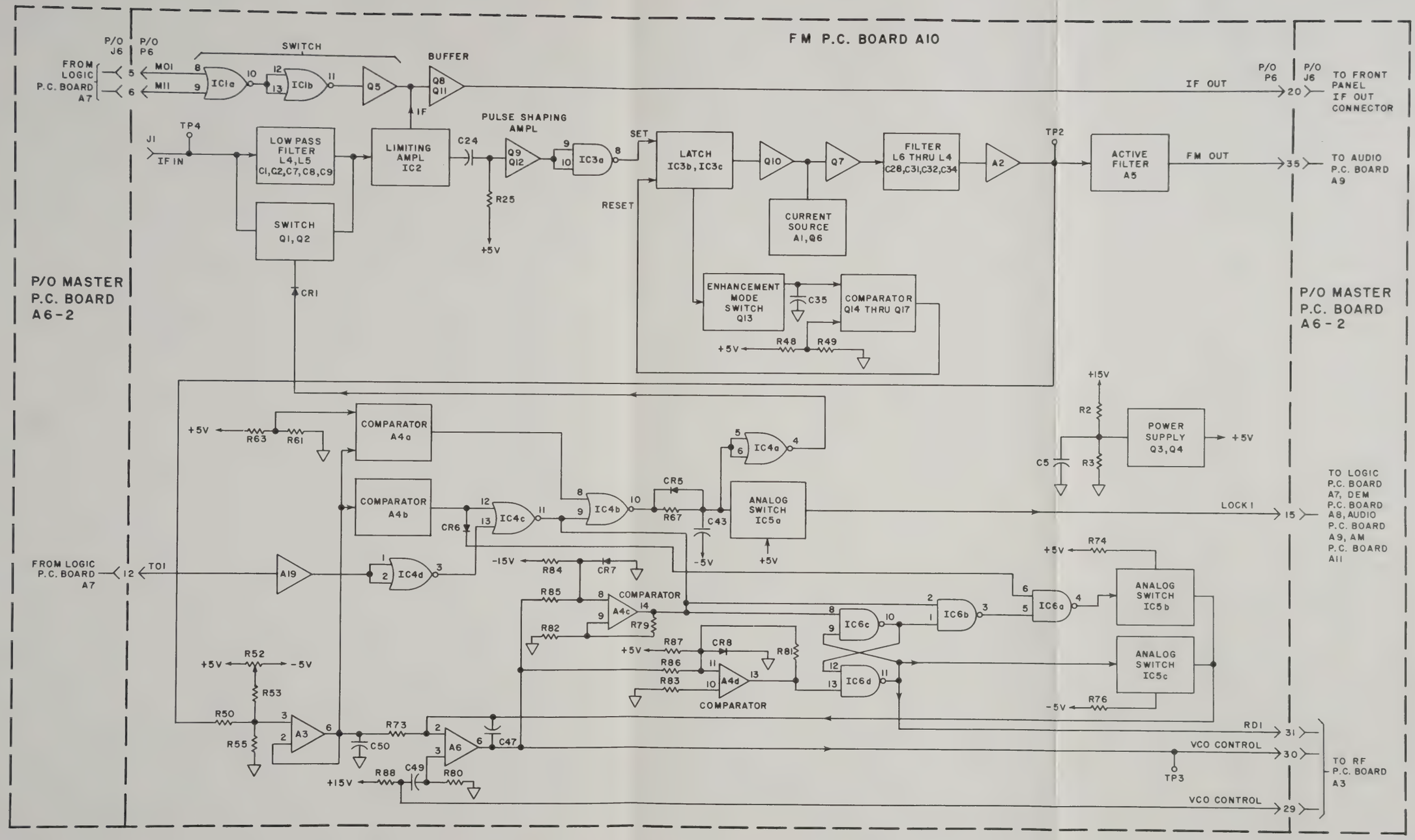


Figure 3-5 Frequency Modulation Circuits, Detailed Block Diagram

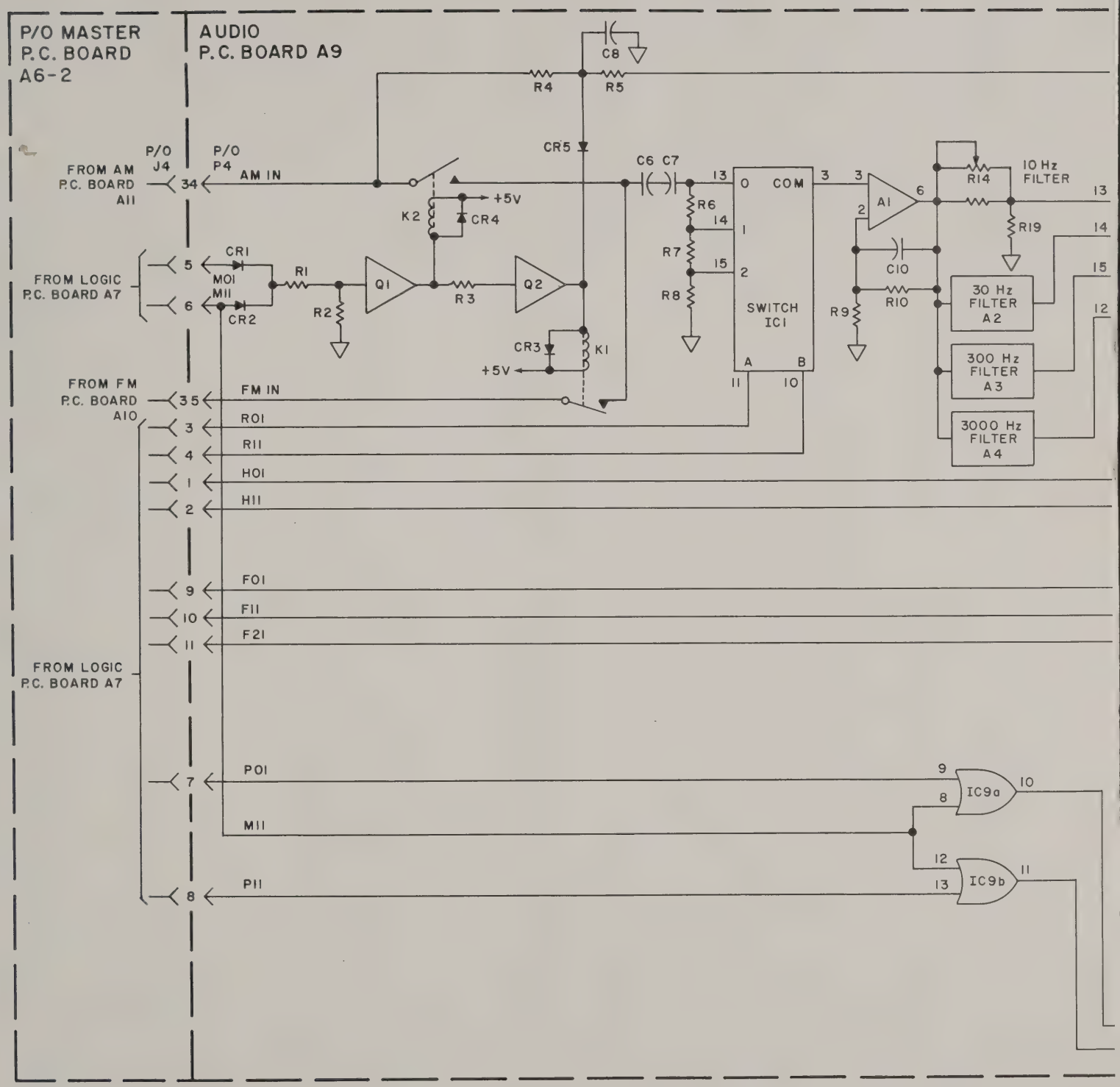

P/O MASTER P.C. BOARD A6-2
AUDIO P.C. BOARD A9
C8
R4
R5
CR5
P/O J4
P/O P4
FROM AM P.C. BOARD A11
34
AM IN
K2
+5V
CR4
C6 C7
13
0
COM
3
3
A1
6
R14
10 Hz FILTER
13
R6
14
1
R7
15
2
R8
SWITCH IC1
2
R19
14
C10
R9
R10
30 Hz FILTER A2
15
FROM LOGIC P.C. BOARD A7
5
CR1
MOI
RI
Q1
Q2
R3
6
MII
CR2
R2
CR3
K1
+5V
300 Hz FILTER A3
12
3000 Hz FILTER A4
FROM FM P.C. BOARD A10
35
FM IN
A
B
11
10
3
ROI
4
RII
1
HOI
2
HII
9
FOI
10
FII
11
F2I
FROM LOGIC P.C. BOARD A7
7
POI
9
8
IC9a
10
MII
12
13
IC9b
11
8
PII

Fig 3-6
3-15/16

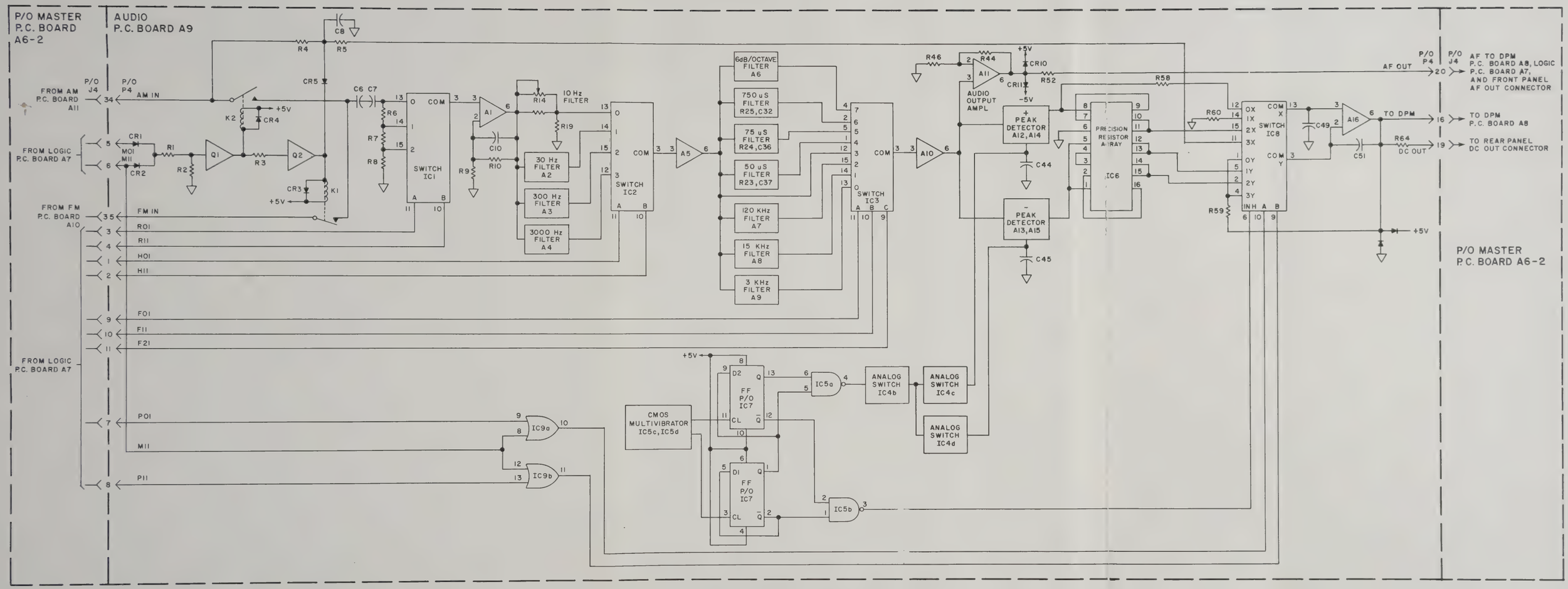


Figure 3-6 Audio Circuits, Detailed Block Diagram

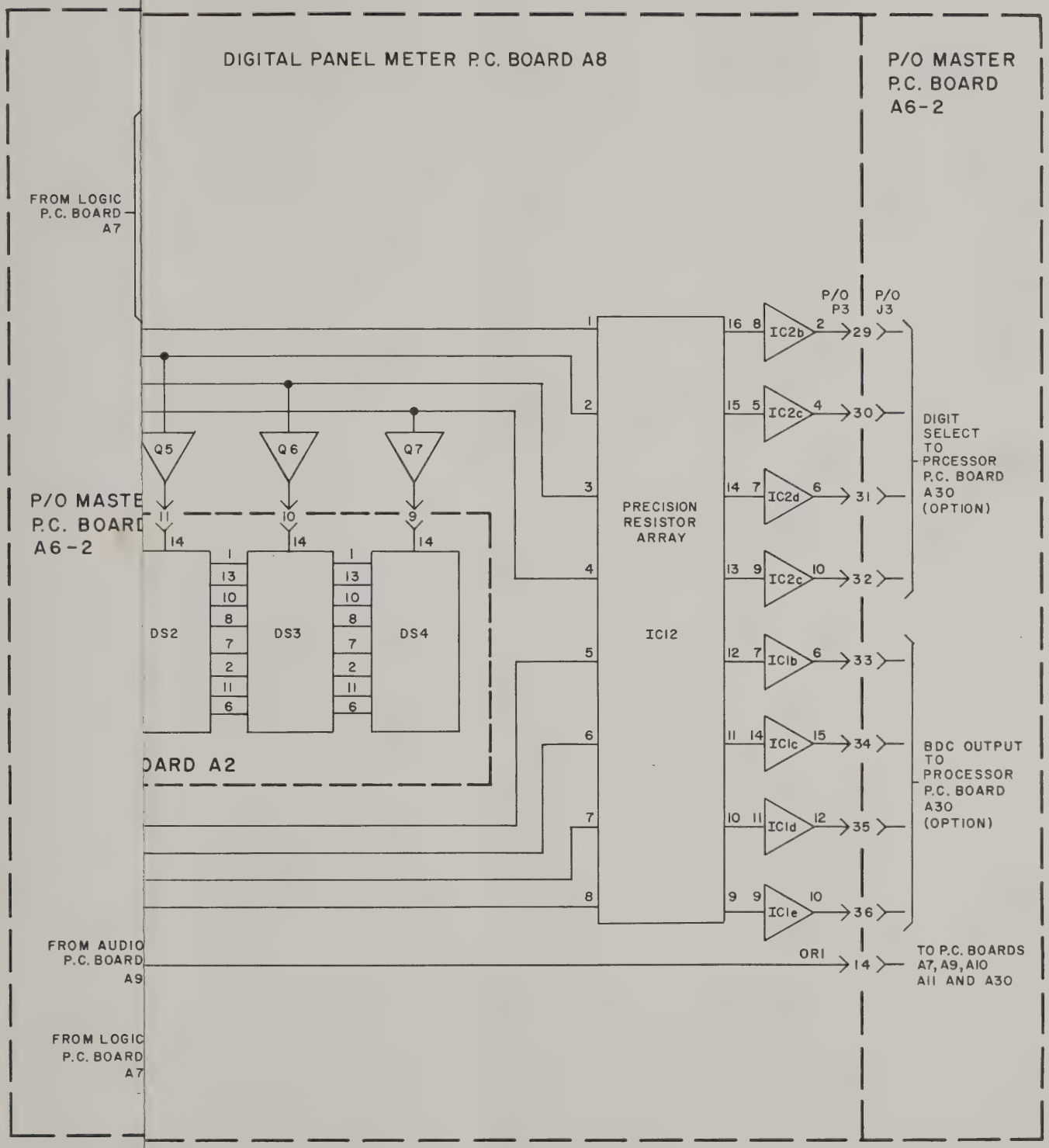
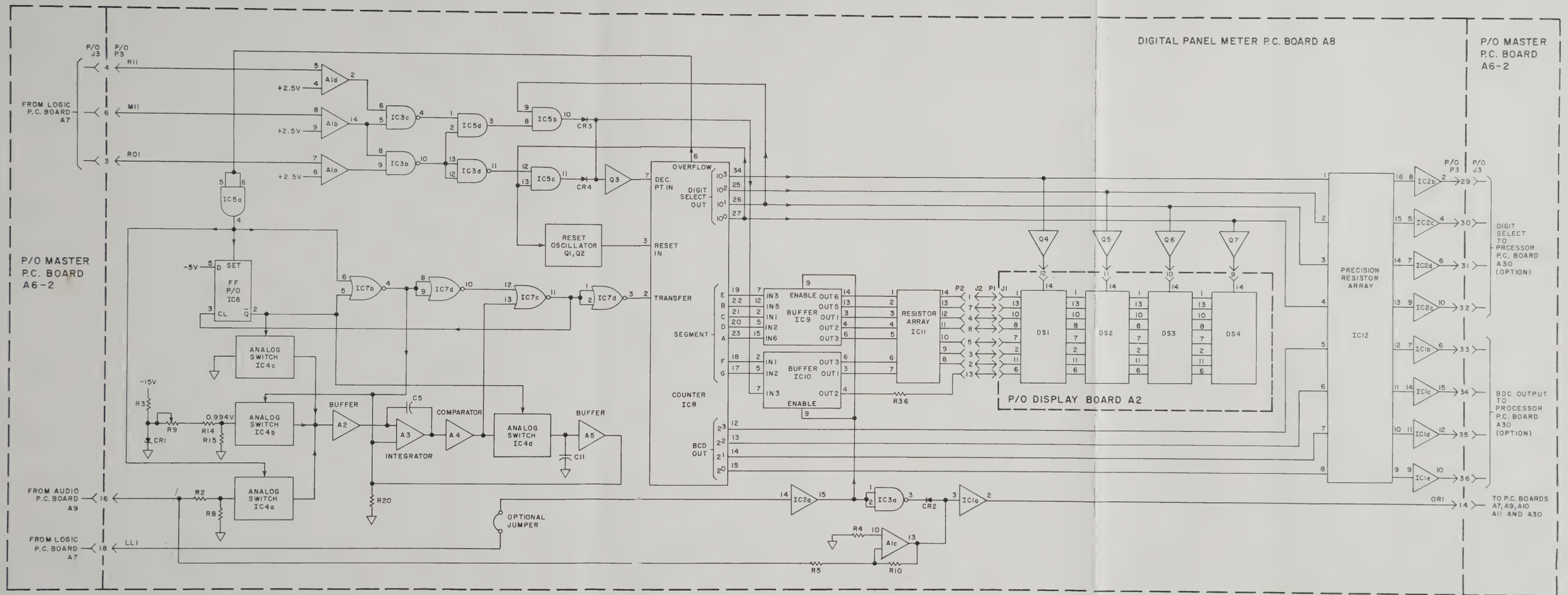


Figure 3-7 Digital Panel Meter Circuits, Detailed Block Diagram



3-17/3-18

Figure 3-7 Digital Panel Meter Circuits, Detailed Block Diagram

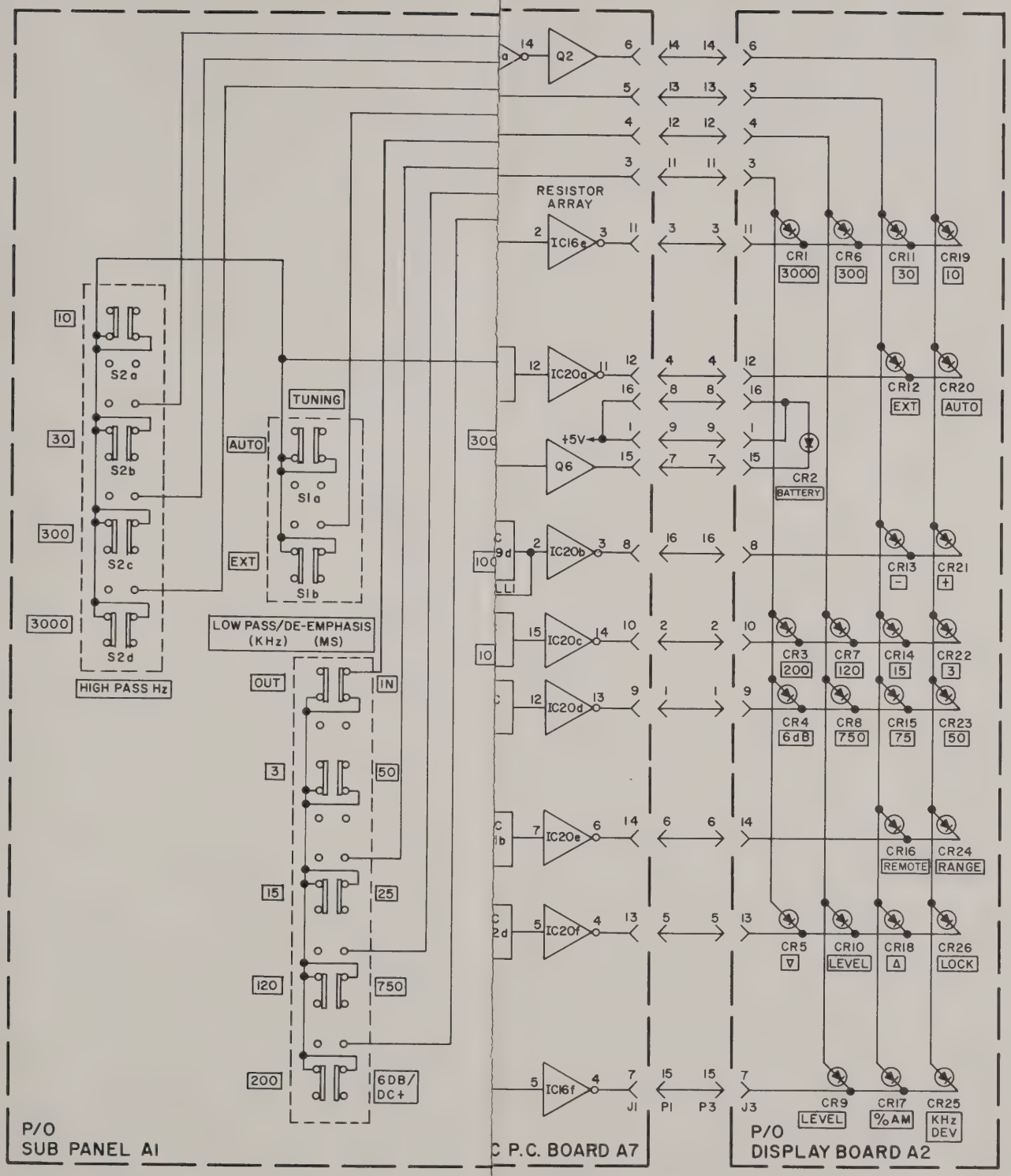
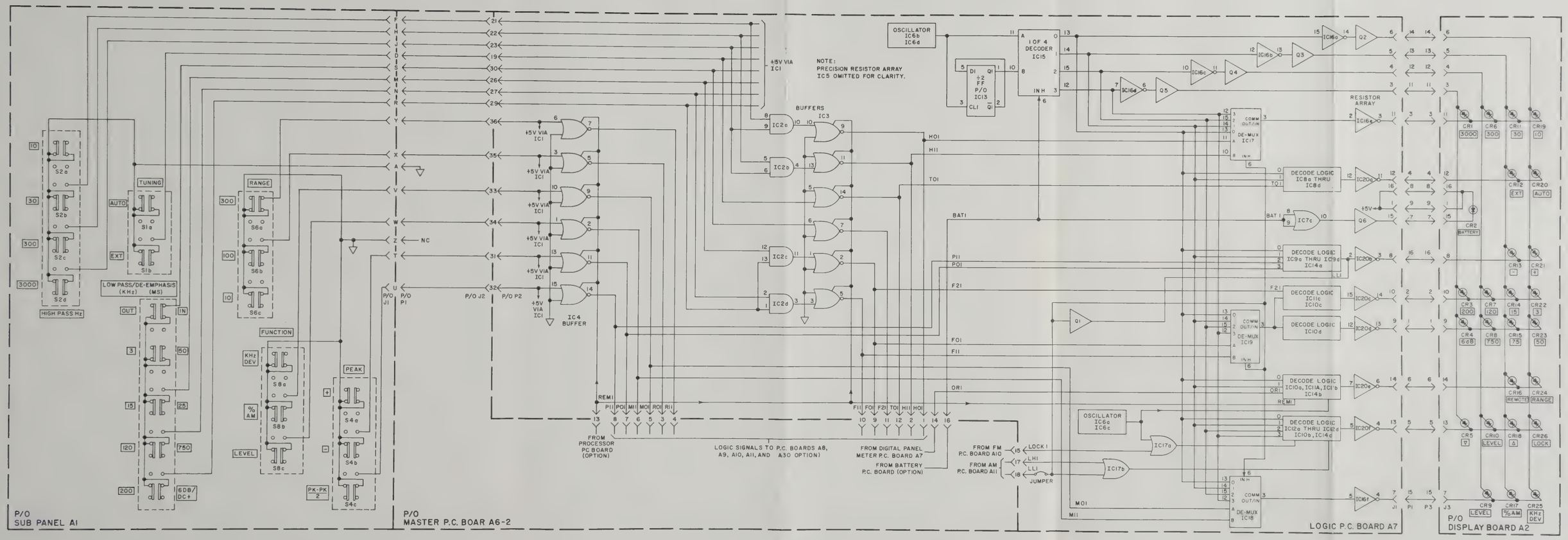


Figure 3-9 Logic Circuits, Detailed Block Diagram

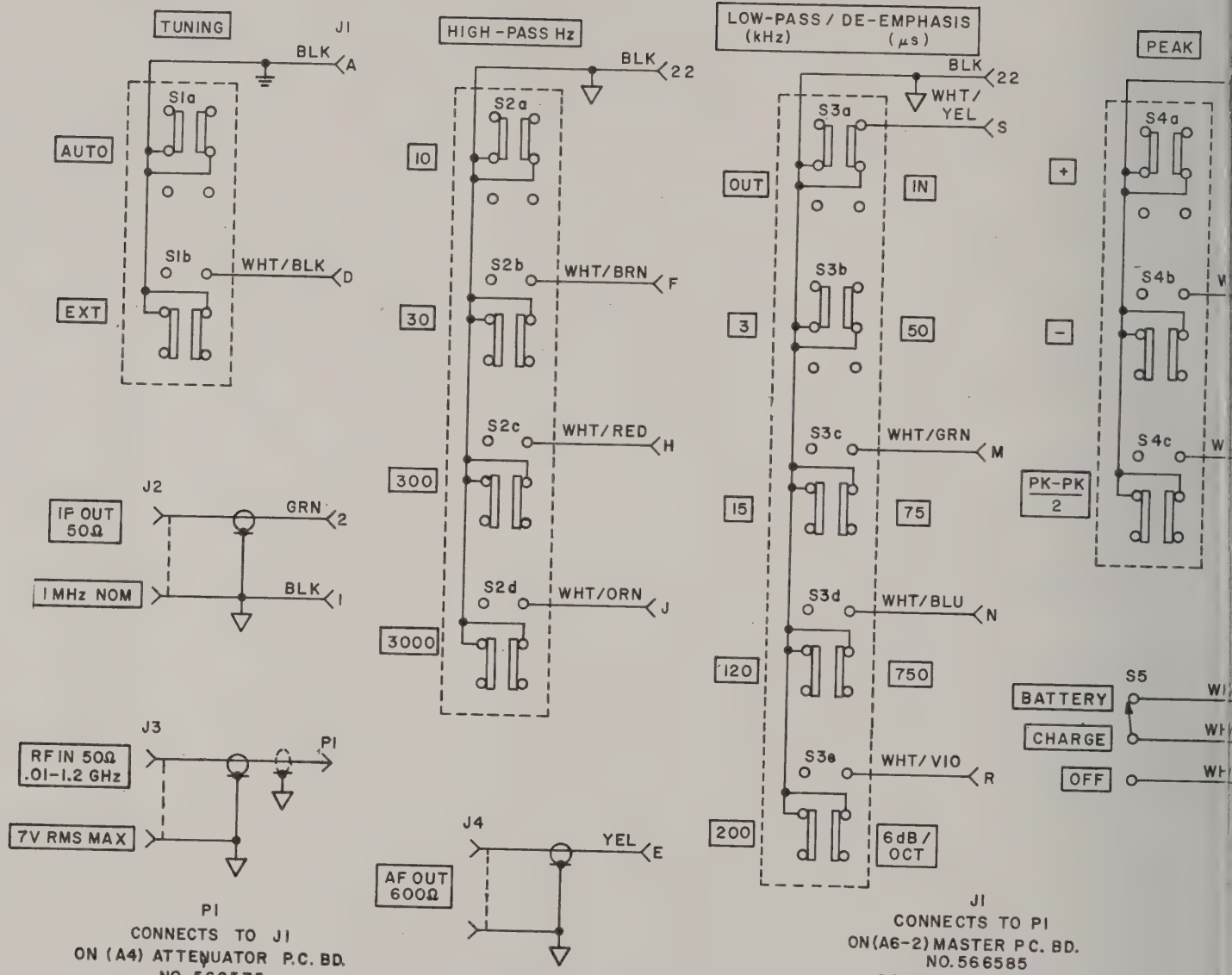


3-21/3-22

Figure 3-9 Logic Circuits, Detailed Block Diagram

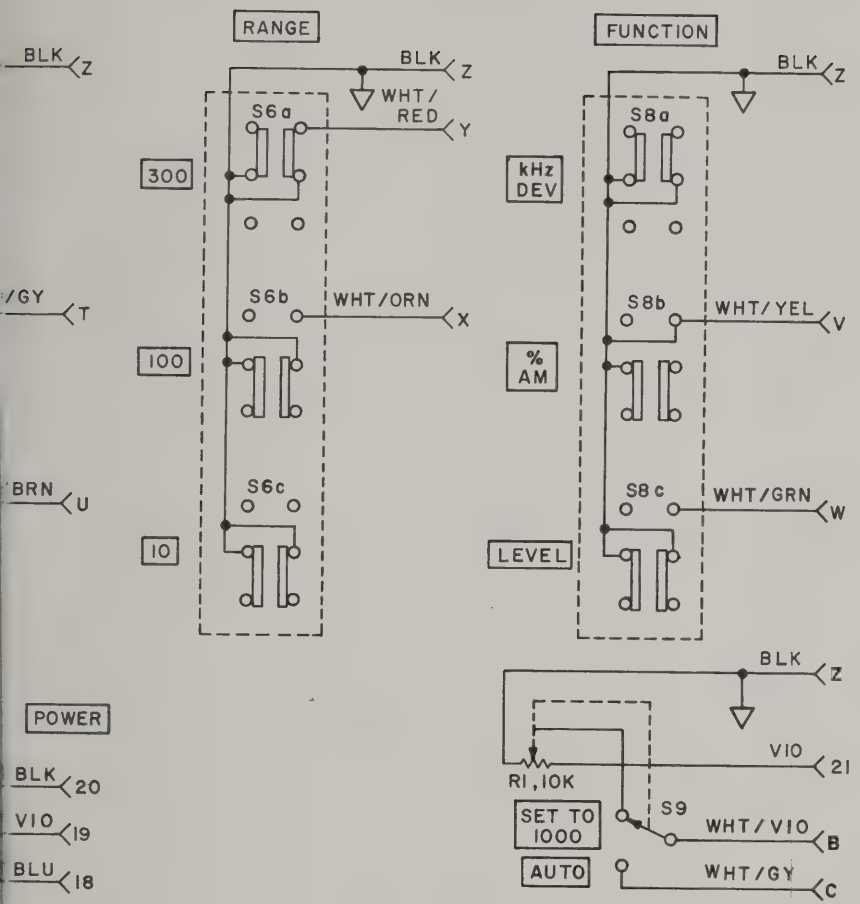
A1 SUB PANEL

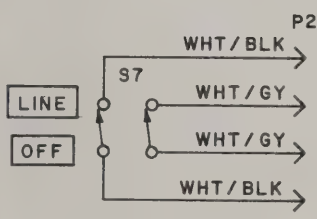
D830896B



NOTES:

1. [ ] EXTERNAL MARKINGS





P2
CONNECTS TO J2
ON (A6-1) MASTER P.C. BD.
NO. 566585
SCHEMATIC 830896
SHT. 3 OF 9

N/C 3
N/C 4
N/C 5
N/C 6
N/C 7
N/C 8
N/C 9
N/C 10
N/C 11

N/C 12
N/C 13
N/C 14
N/C 15
N/C 16
N/C 17
N/C K
N/C L
N/C P

Figure 6-1 Sub Panel A1, Schematic Diagram

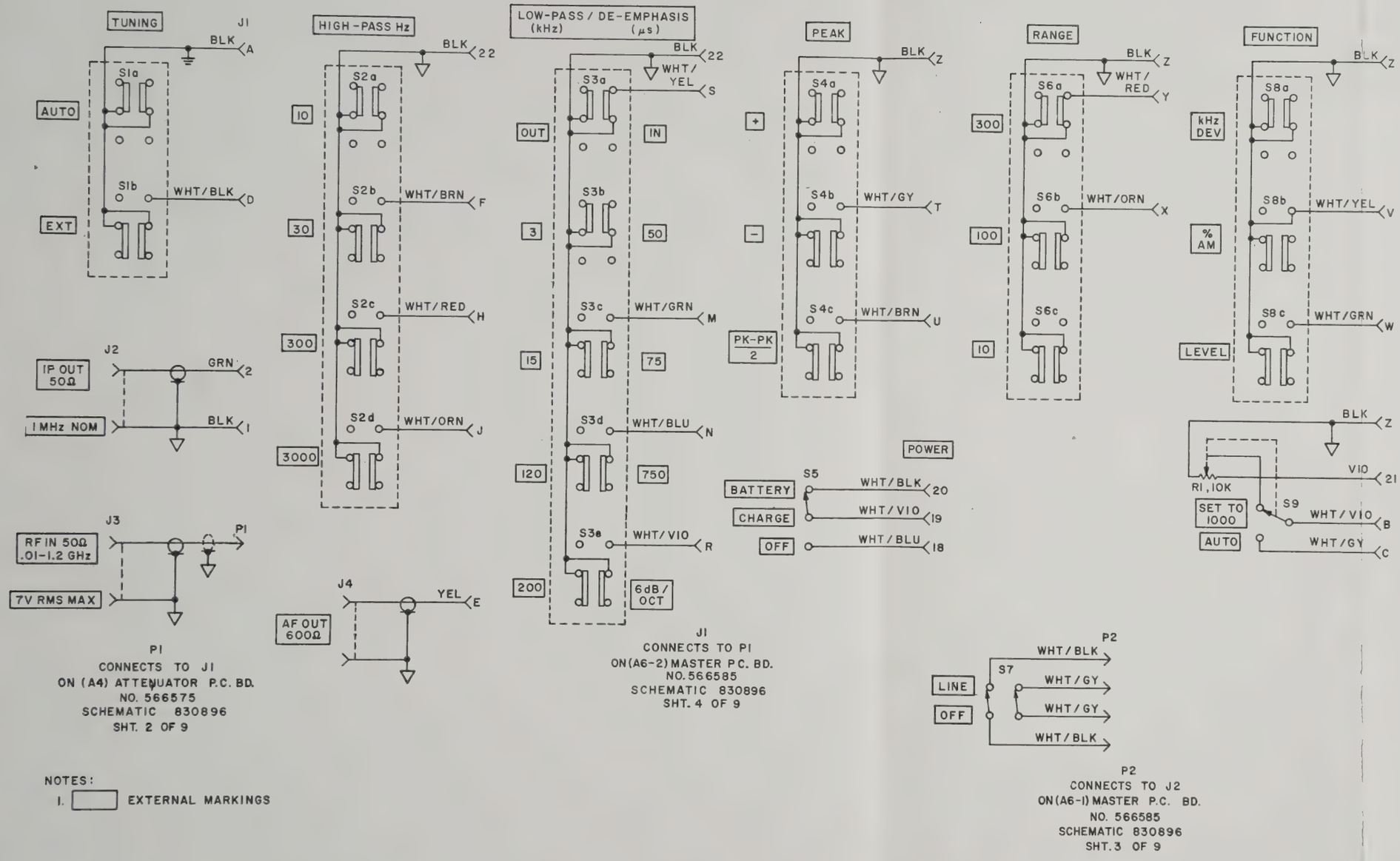


Figure 6-1 Sub Panel A1, Schematic Diagram

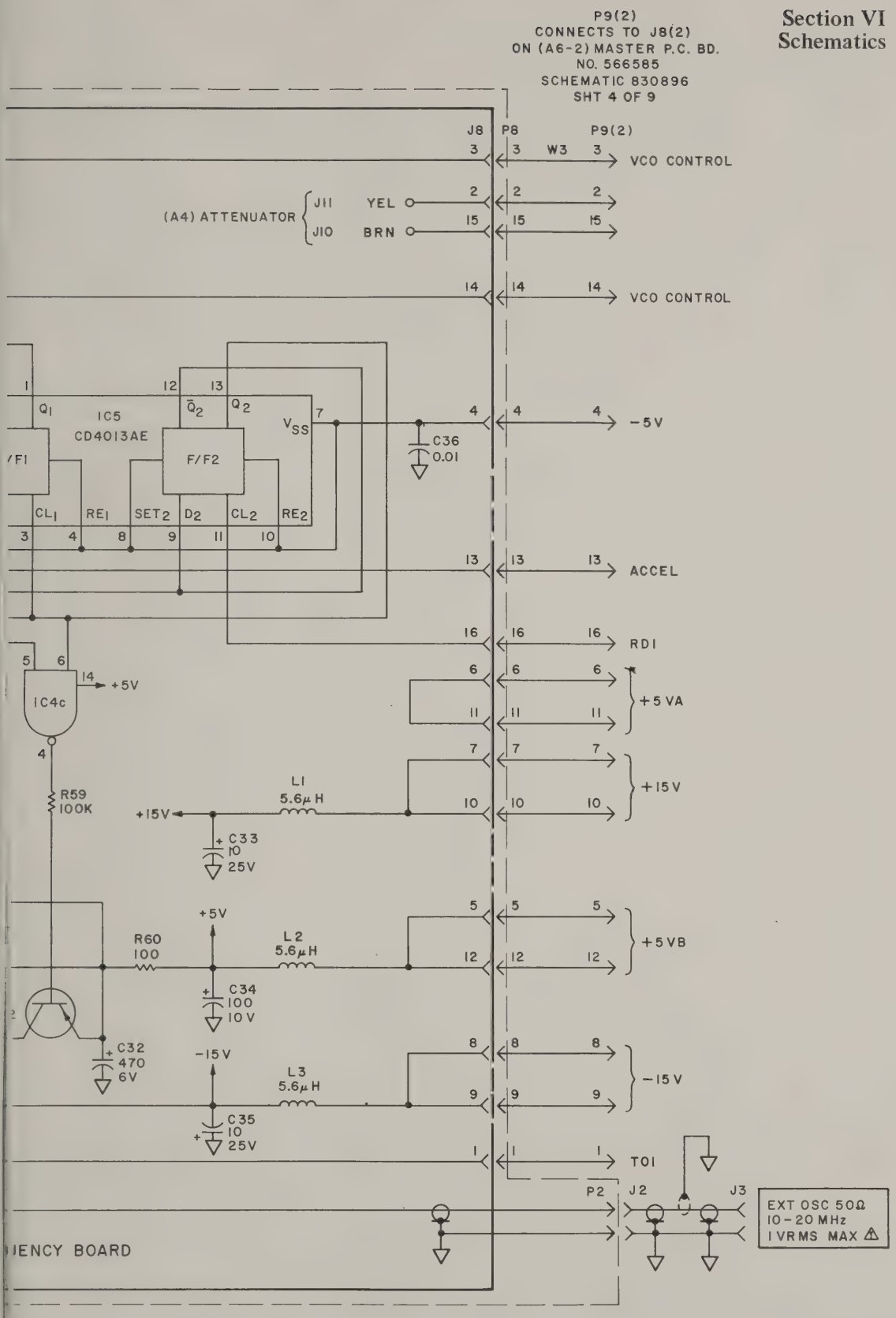
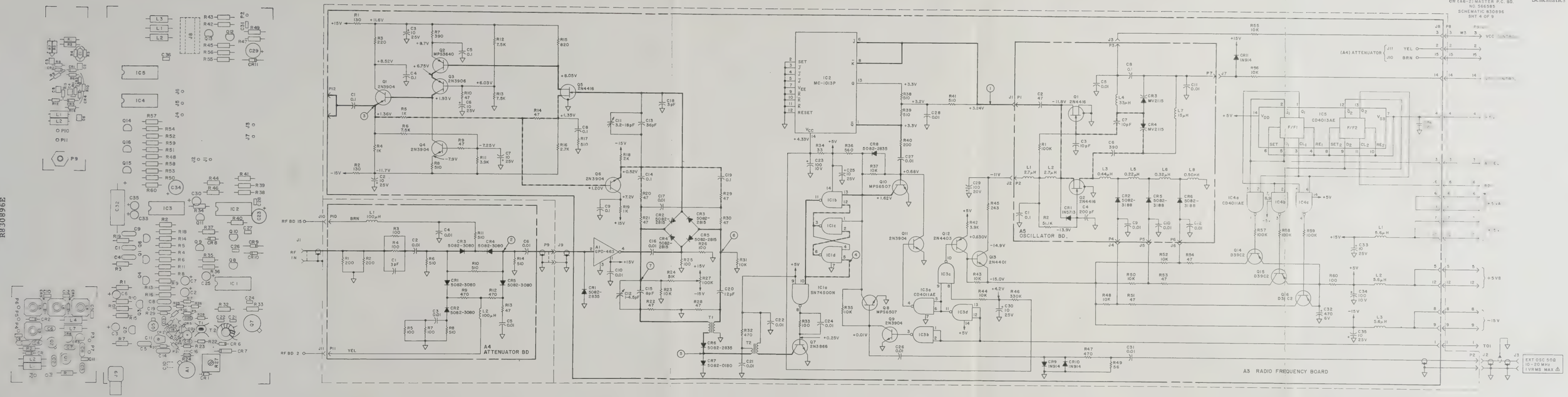


Figure 6-2 RF Assembly, Schematic Diagram



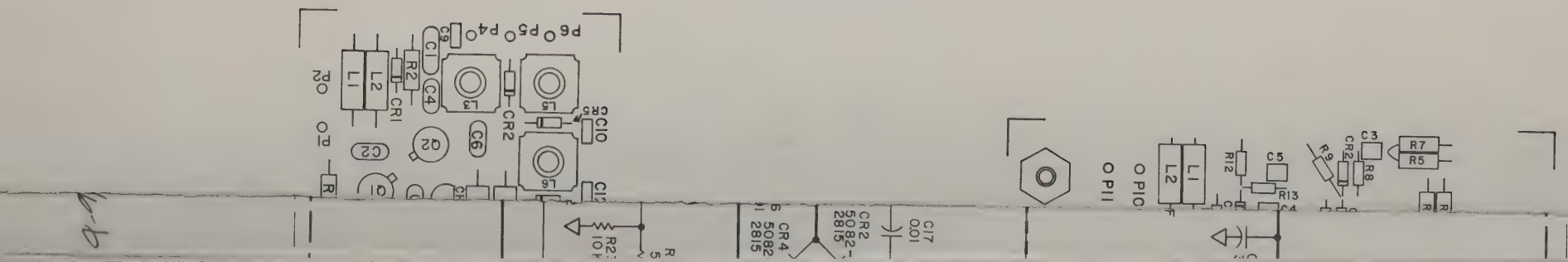
NOTES:
1. CAPACITANCE VALUES IN μF, UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS.
3. ▭ EXTERNAL MARKINGS.
4. ——— SIGNAL PATH.
5. ——— FEED BACK PATH.
6. ▽ COMMON GROUND.
7. LAST NUMBERS USED ON A 4
   R14 C6 CR5 ON A 5
   C12 CR6 L8 ON A 3
   R60 C36 CR111 Q16

6-5/6-6

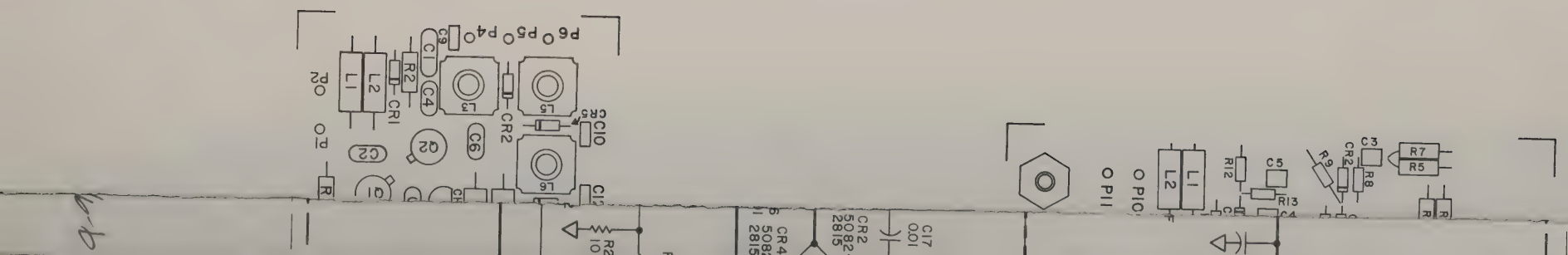
Figure 6-2 RF Assembly, Schematic Diagram

R8308962

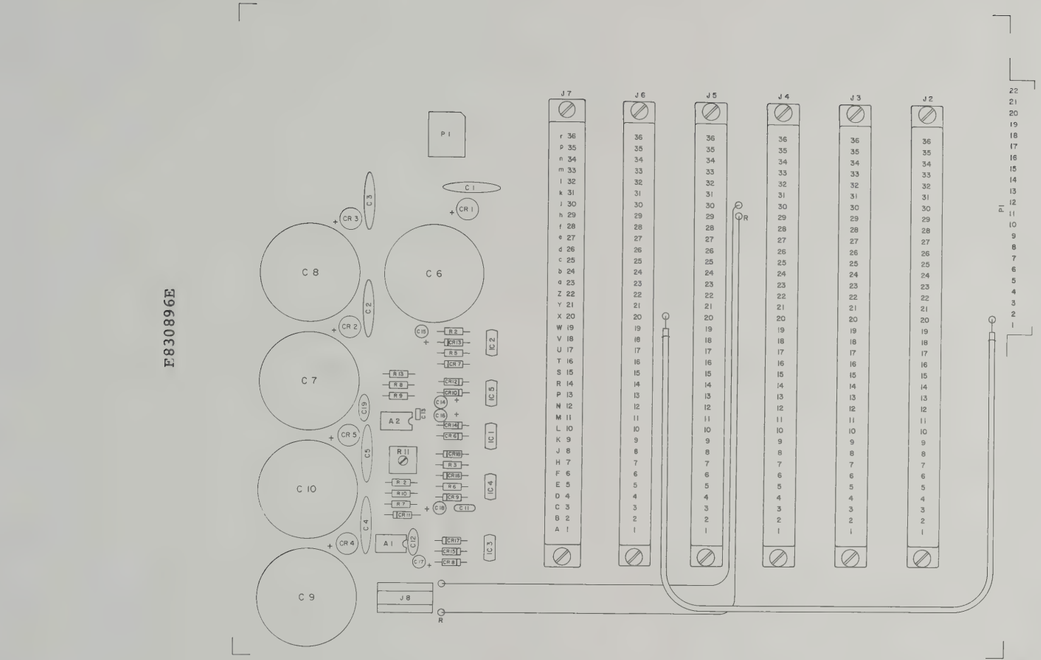
R830896E


P6 P5 P4
L1
L2
R2
C1
C3
C4
L3
L5
CR1
CR2
C10
C2
Q2
C6
L6
C12
R2
10K
CR4
5082-
2815
CR2
5082-
2815
C17
0.001
P11
P10
L1
L2
R12
C5
R13
C3
R9
CR2
R8
R7
R5

R830896E


P6 P5 P4
L1
L2
CR1
R2
C1
C4
C3
L3
L5
CR2
CR3
C10
C6
C2
Q2
C12
P1
P0
O P11
O P10
R12
C5
R13
C4
R9
CR2
C3
R8
R7
R5
CR4
5082-2815
C17
0.001

F830896E



NOTES:
1. CAPACITANCE VALUES IN μF, UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS.
3. LAST NUMBERS USED:
   R13, C19, CR18
4. NUMBERS NOT USED:
   R1, R4

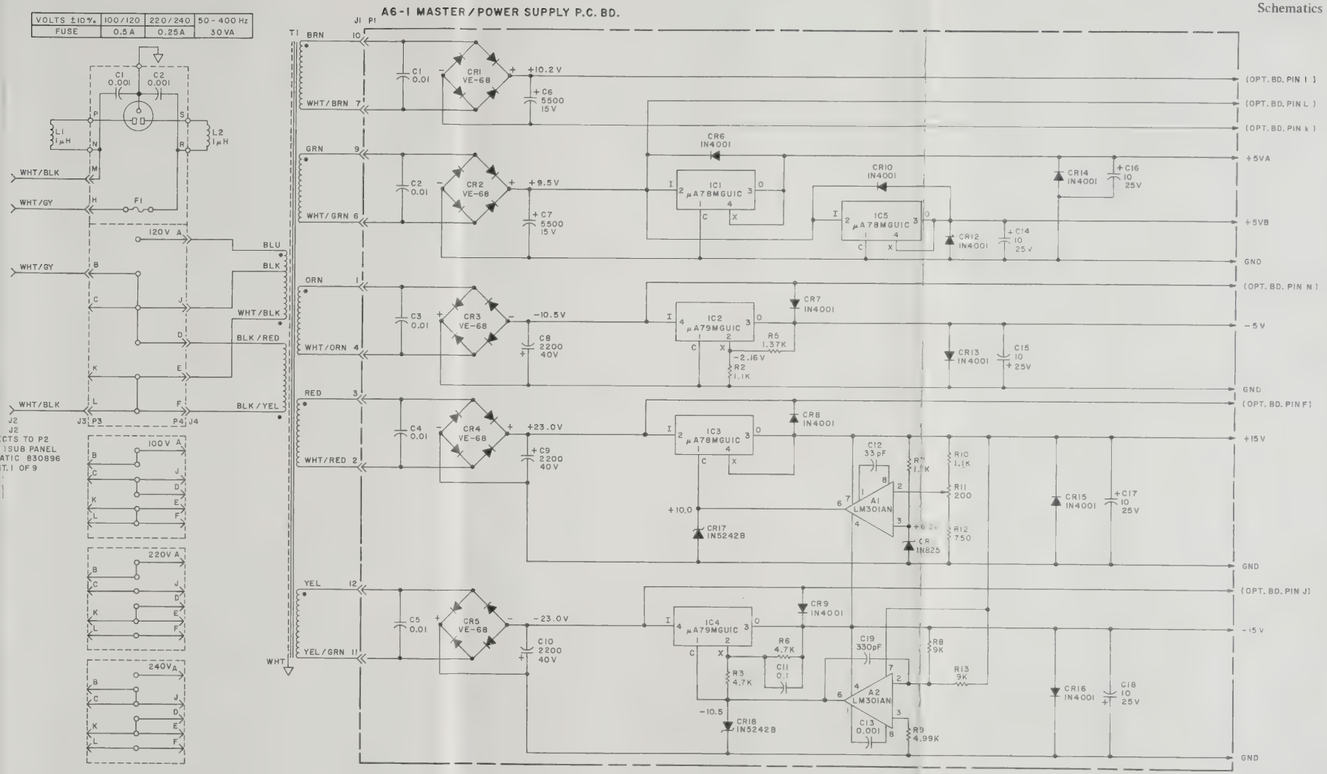


Figure 6-3 Master/Power Supply Printed Circuit Board A6-1, Schematic Diagram

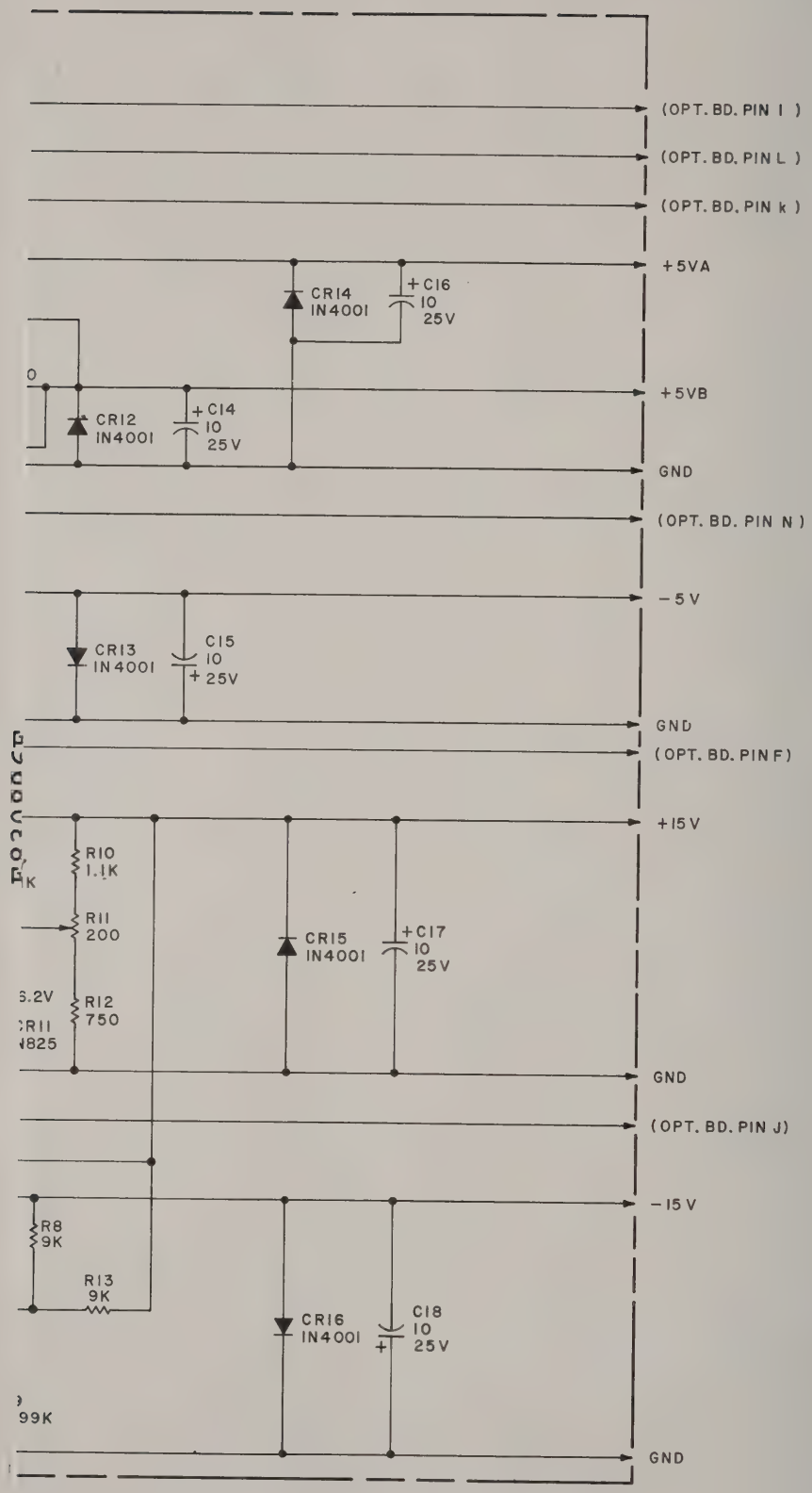


Figure 6-3 Master/Power Supply Printed Circuit Board A6-1, Schematic Diagram

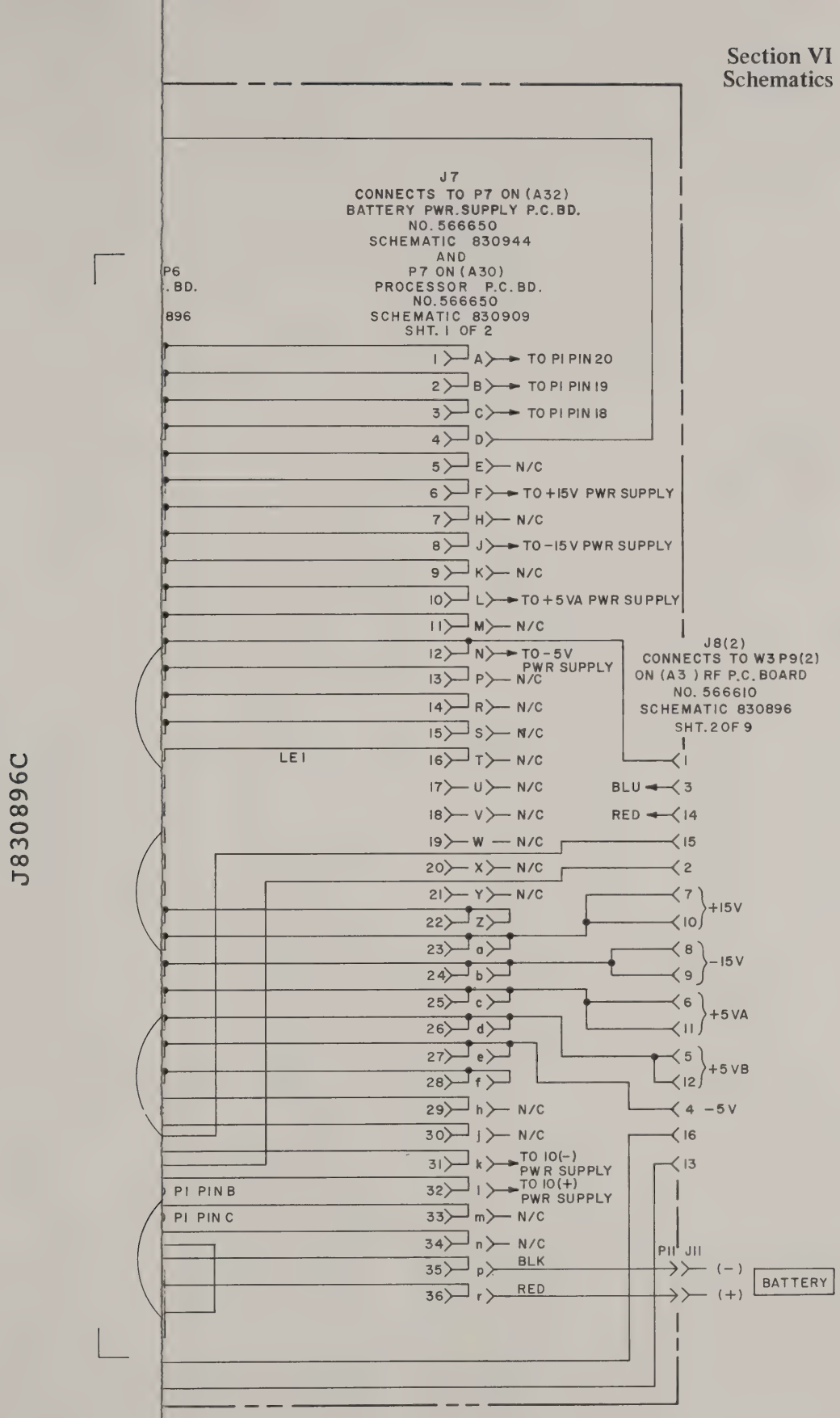


Figure 6-4 Master Printed Circuit Board A6-2, Schematic Diagram

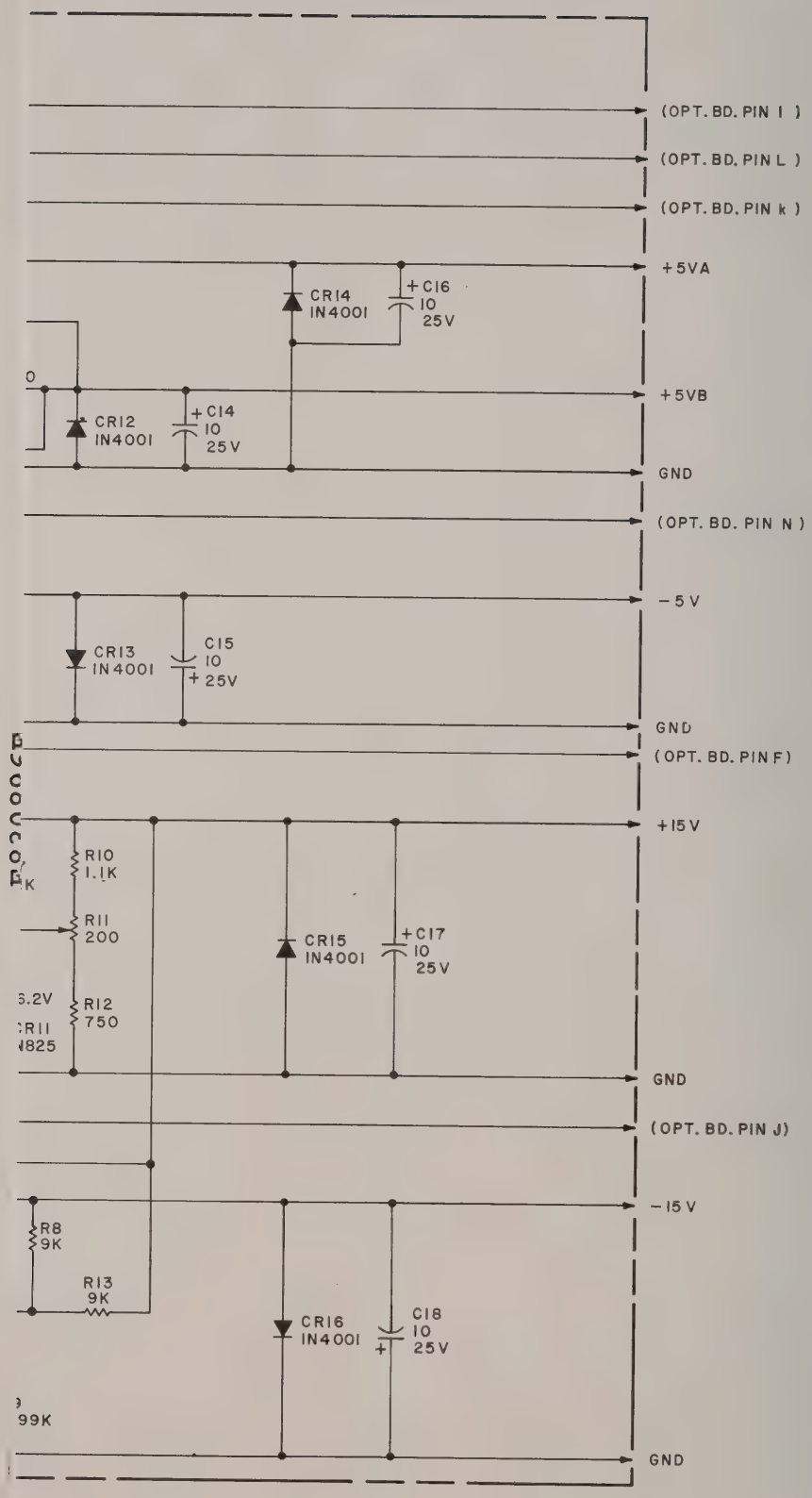
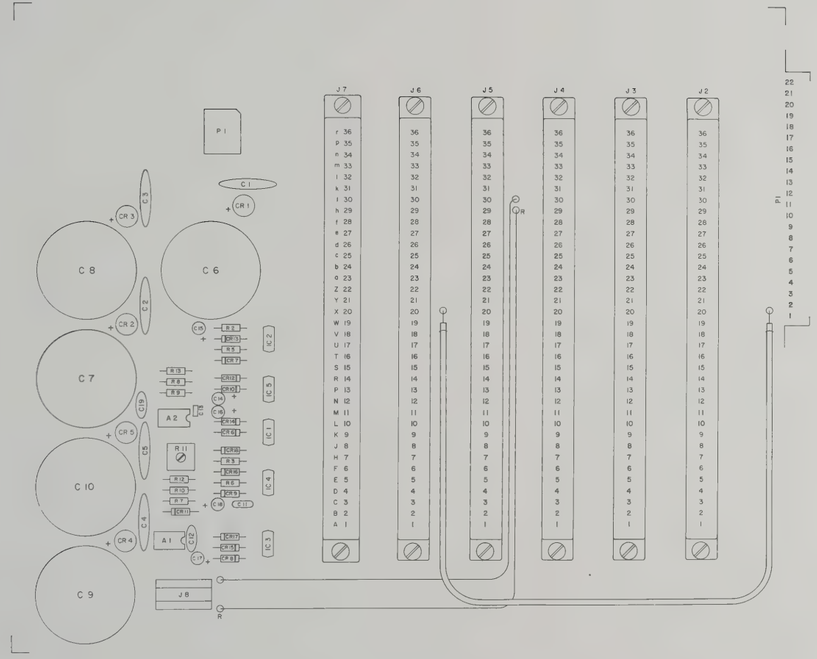


Figure 6-3 Master/Power Supply Printed Circuit Board A6-1, Schematic Diagram



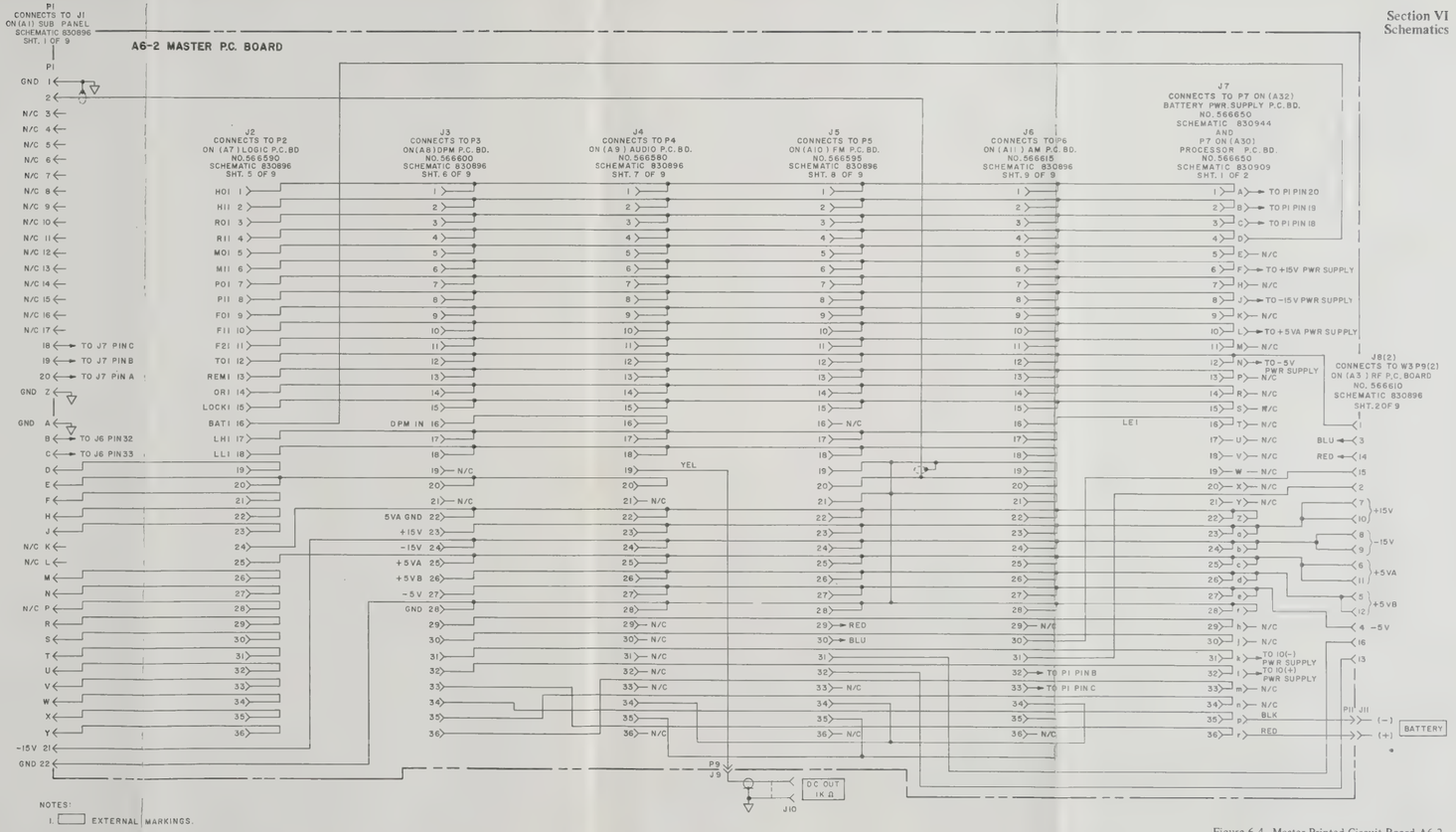


Figure 6-4 Master Printed Circuit Board A6-2, Schematic Diagram

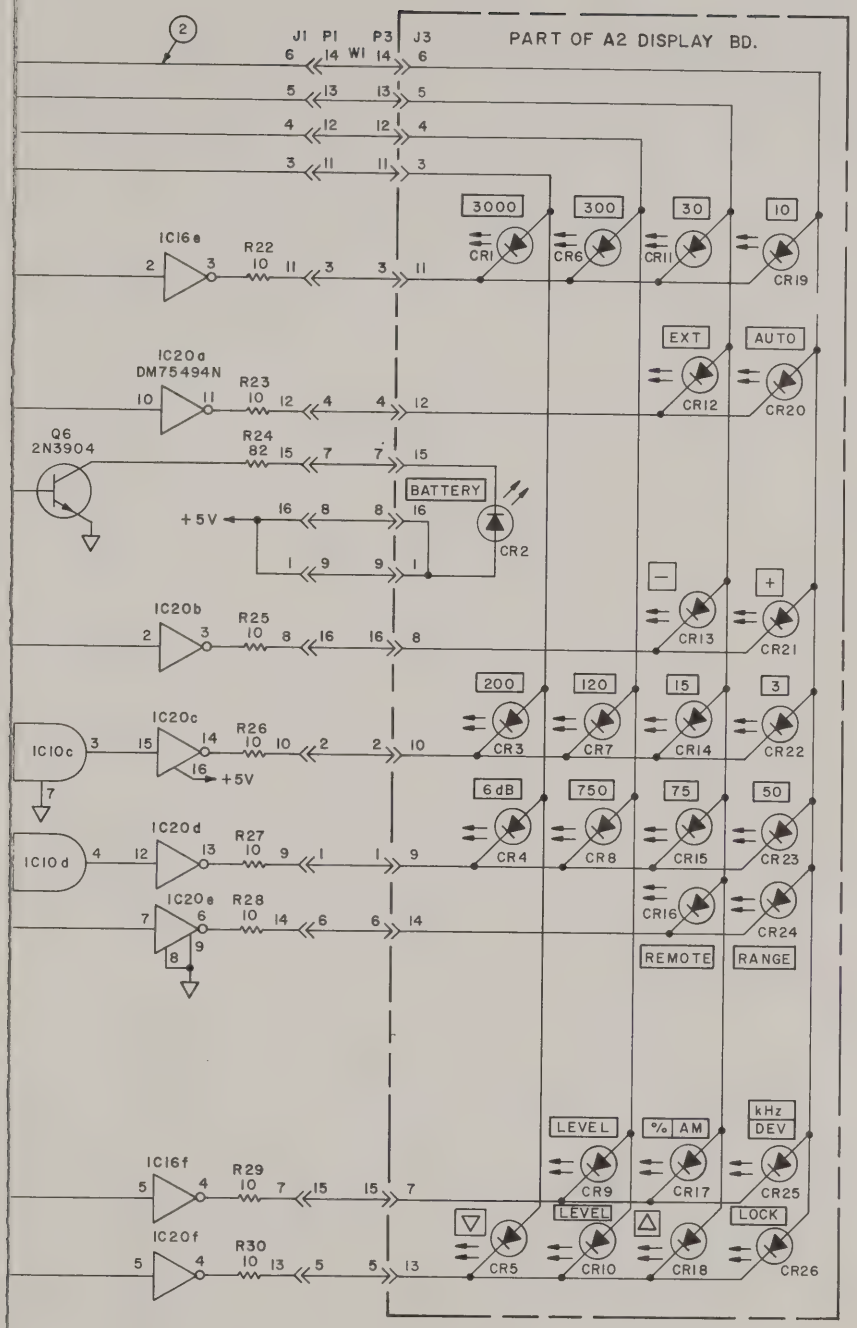


Figure 6-5 Logic Printed Circuit Board A7, Schematic Diagram

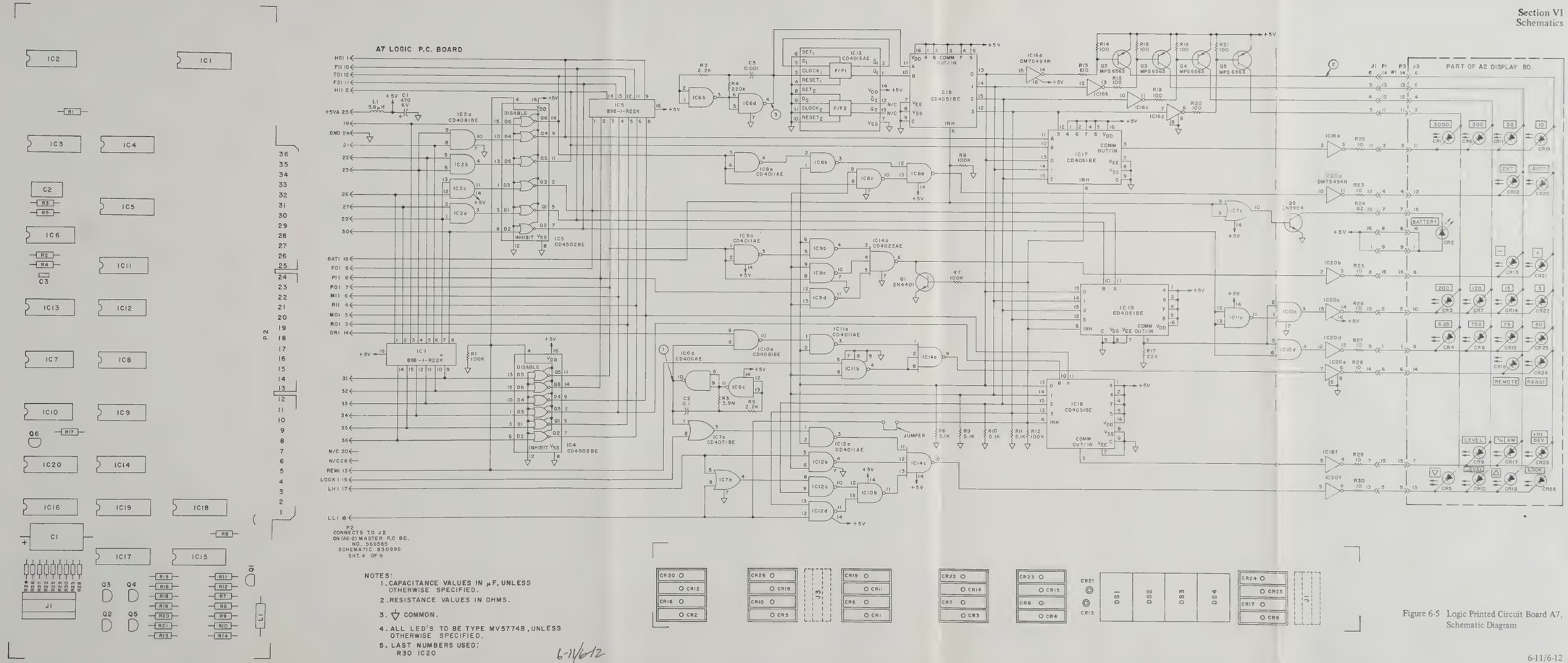

A7 LOGIC P.C. BOARD
PART OF A2 DISPLAY BD.
P2
CONNECTS TO J2 ON (A6-2) MASTER P.C BD. NO. 566585 SCHEMATIC 830896 SHT. 4 OF 9
NOTES:
1. CAPACITANCE VALUES IN μF, UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS.
3. ▽ COMMON.
4. ALL LED'S TO BE TYPE MV5774B, UNLESS OTHERWISE SPECIFIED.
5. LAST NUMBERS USED: R30 IC20
6-11/6-12

Figure 6-5 Logic Printed Circuit Board A7, Schematic Diagram

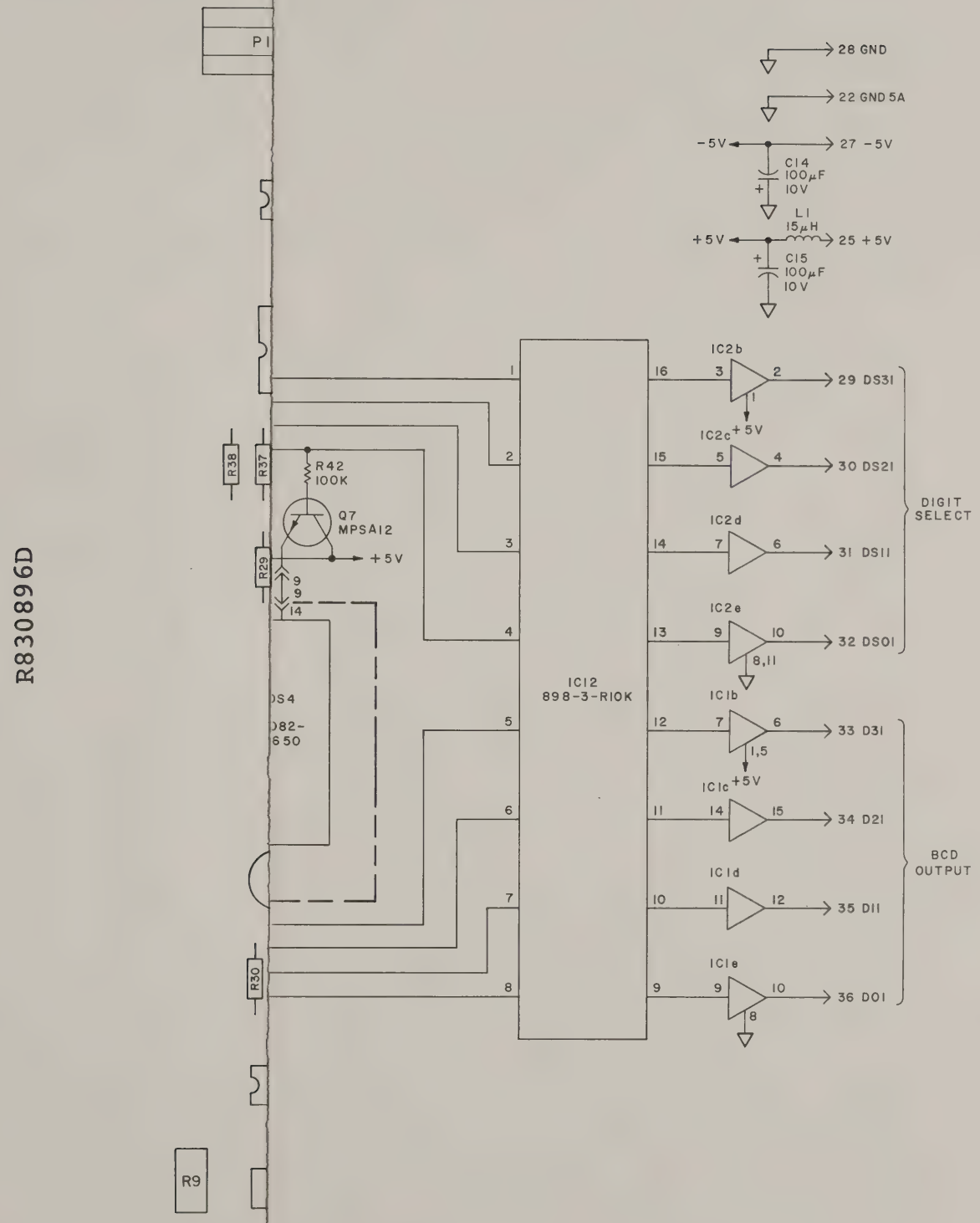
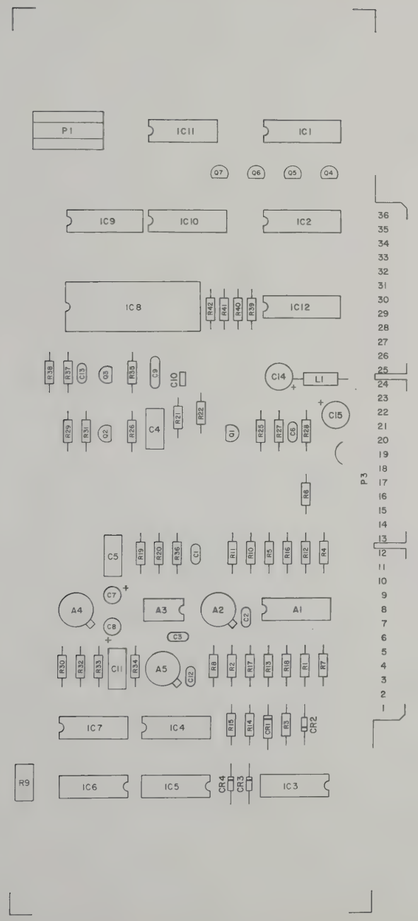
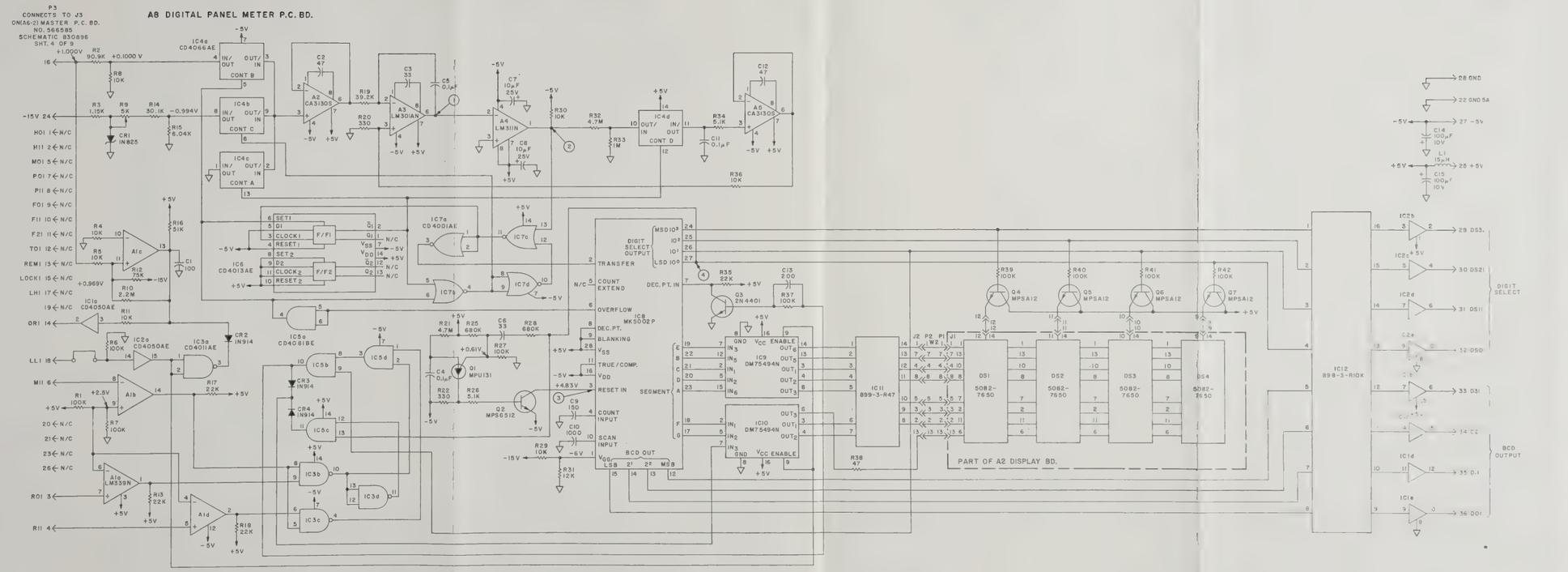


Figure 6-6 Digital Panel Meter Printed Circuit Board A8, Schematic Diagram





NOTES:

1. CAPACITANCE VALUES IN pF, UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS.
3. ▽ COMMON.
4. LAST NUMBERS USED:
   R42 C15 Q7 IC12
5. NUMBERS NOT USED:
   R23 R24

6-13/6-14

Figure 6-6 Digital Panel Meter Printed Circuit Board A8, Schematic Diagram

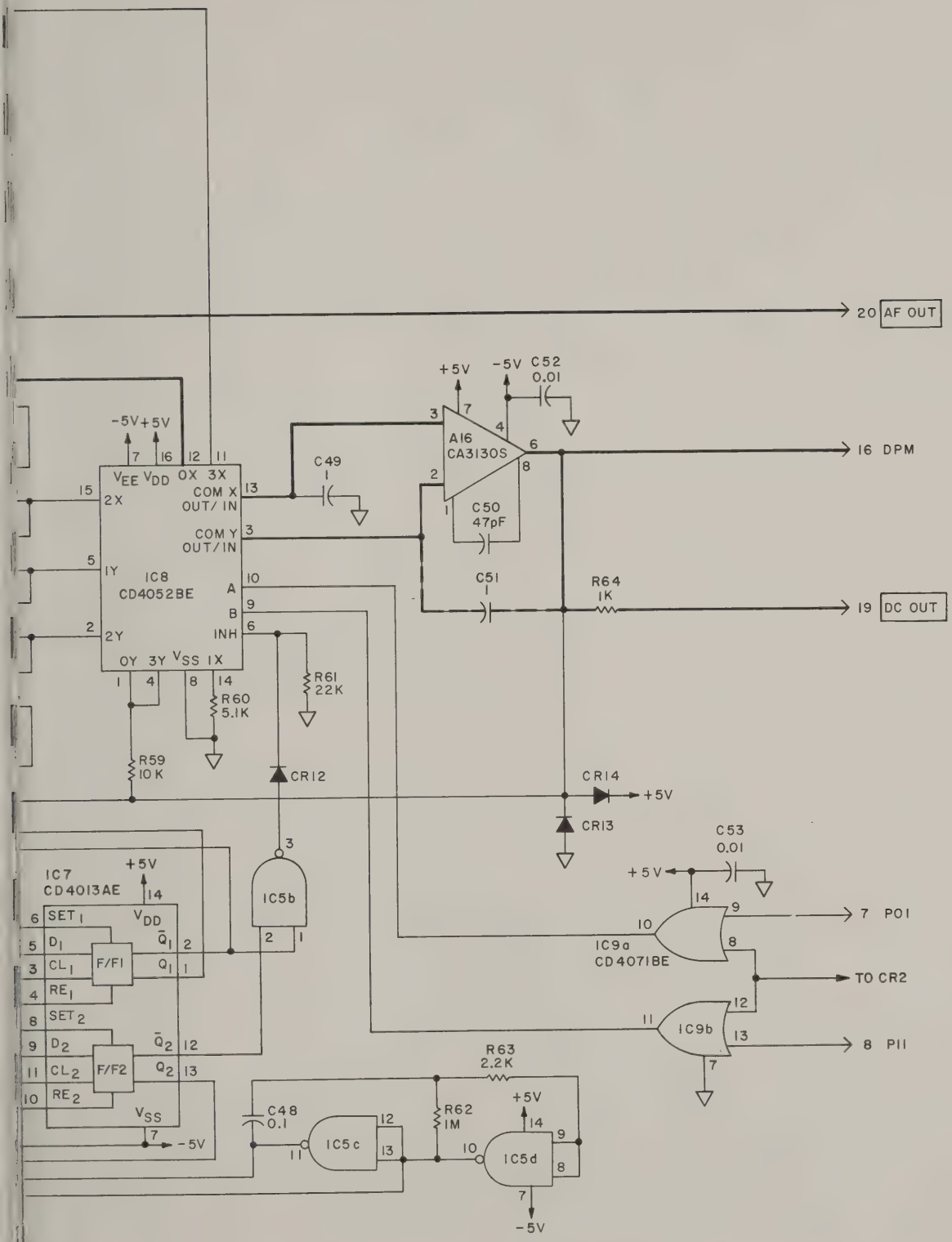
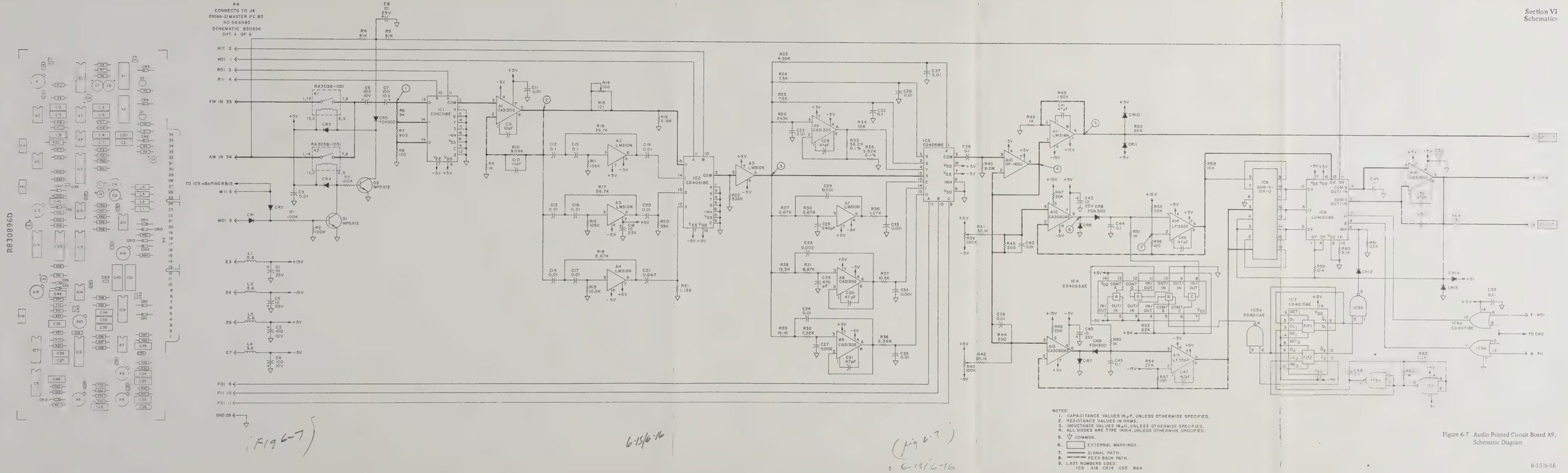


Figure 6-7 Audio Printed Circuit Board A9, Schematic Diagram

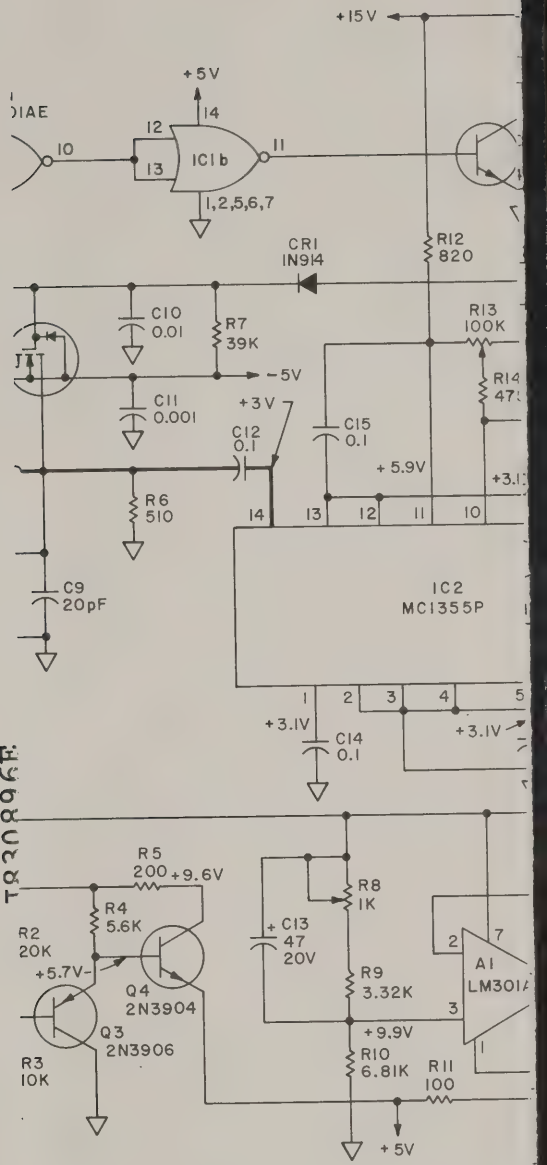


NOTES:
1. CAPACITANCE VALUES IN μF, UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS.
3. INDUCTANCE VALUES IN μH, UNLESS OTHERWISE SPECIFIED.
4. ALL DIODES ARE TYPE IN914, UNLESS OTHERWISE SPECIFIED.
5. ▽ COMMON.
6. ▭ EXTERNAL MARKINGS.
7. ——— SIGNAL PATH.
8. ——— FEED BACK PATH.
9. LAST NUMBERS USED:
IC9 A16 CR14 C53 R64

Figure 6-7 Audio Printed Circuit Board A9, Schematic Diagram

R830896D
C11
C9
A1
R10
C10
R9
C12
C15
A2
R16
R11
C19
R22
R14
R15
R19
A5
R42
R44
R40
CR7
R48
C45
A13
R50
R53
C43
R59
IC4
IC6
R58
R51
C42
CR6
CR8
A12
C44
R47
R45
R41
R39
R43
C32
R25
R23
R24
IC7
C36
C37
IC5
C48
R62
R63
CR12
R61

A10 FM P.C. BOARD

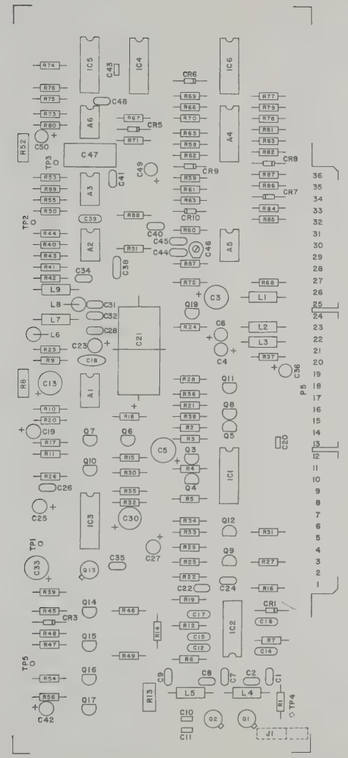


NOTES:

1. CAPACITANCE VALUES I
2. RESISTANCE VALUES IN
3. INDUCTANCE VALUES IN
4. ⏚ COMMON.
5. ——— SIGNAL
6. - - - - FEED BA
7. LAST NUMBERS USED:
   R89 C50 Q19 C
8. NUMBERS NOT USED:
   CR4 C37 C29 R
   CR2

7.L-8
PC-11616

R830896D
C11
C9
A1
R10
C10
R9
C12
C15
A2
R16
R11
C19
R22
R14
R15
A5
R19
R42
R44
R40
CR7
R48
C45
A13
R50
R53
C43
R59
IC4
IC6
R58
R51
C42
A12
C44
R47
R45
R41
R39
R43
C32
R25
R23
R24
IC7
C36
C37
IC5
C48
R62
R63
CR12
R61



A10 FM P.C. BOARD

P5
CONNECTS TO J5
ON(A6-2) MASTER PC BD
NO.5665B5
SCHEMATIC 830896
SHT.4 OF 9

NOTES:
1. CAPACITANCE VALUES IN μF, UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE VALUES IN OHMS.
3. INDUCTANCE VALUES IN μH, UNLESS OTHERWISE SPECIFIED.
4. ⏚ COMMON.
5. ——— SIGNAL PATH.
6. ——— FEED BACK PATH.
7. LAST NUMBERS USED:
   R89 C50 Q19 CR10 L9
8. NUMBERS NOT USED:
   CR4 C37 C29 R64 Q18
   CR2

6-17/6-18

J8306962

Figure 6-8 FM Printed Circuit Board A10, Schematic Diagram

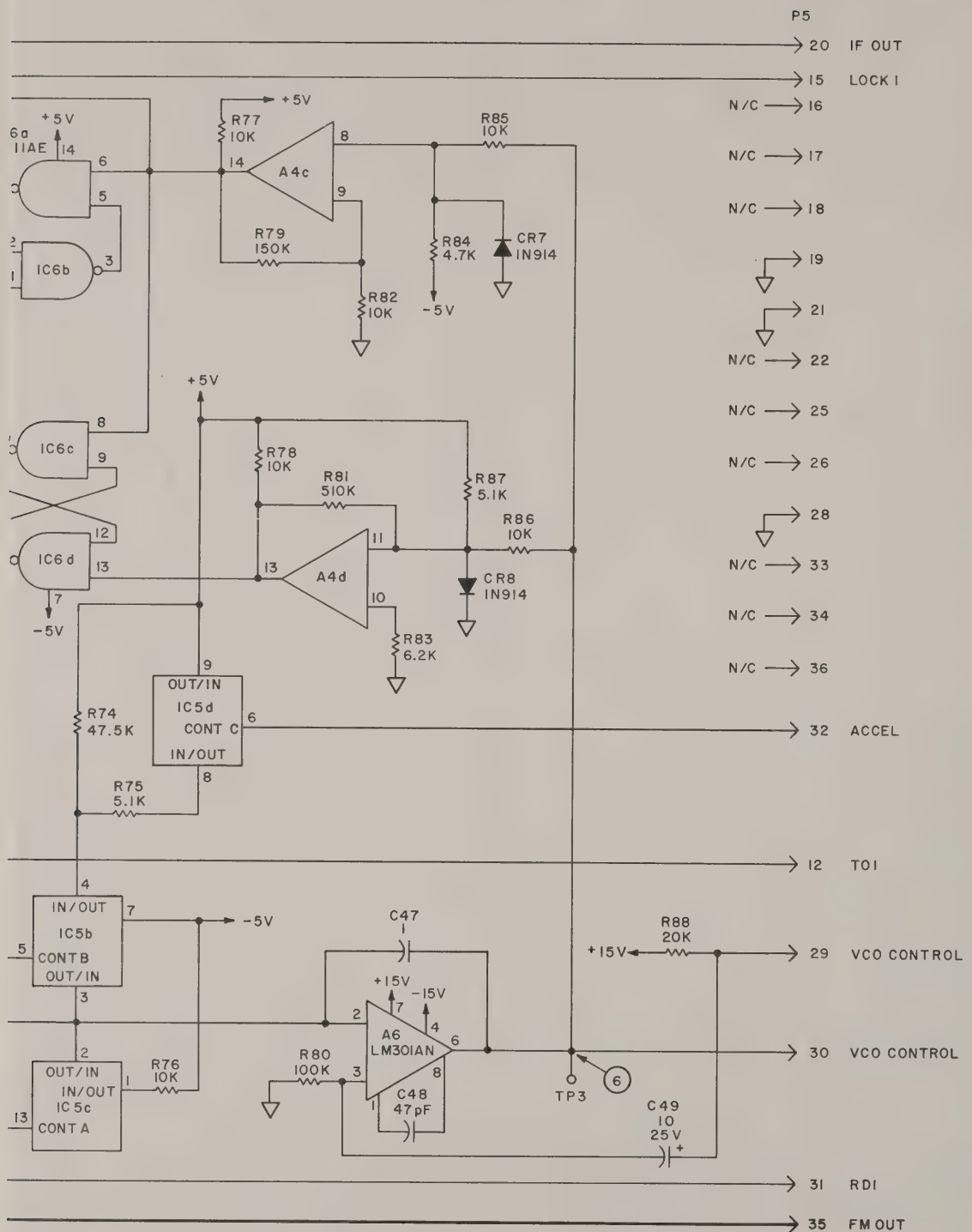


Figure 6-8 FM Printed Circuit Board A10, Schematic Diagram

E830896B

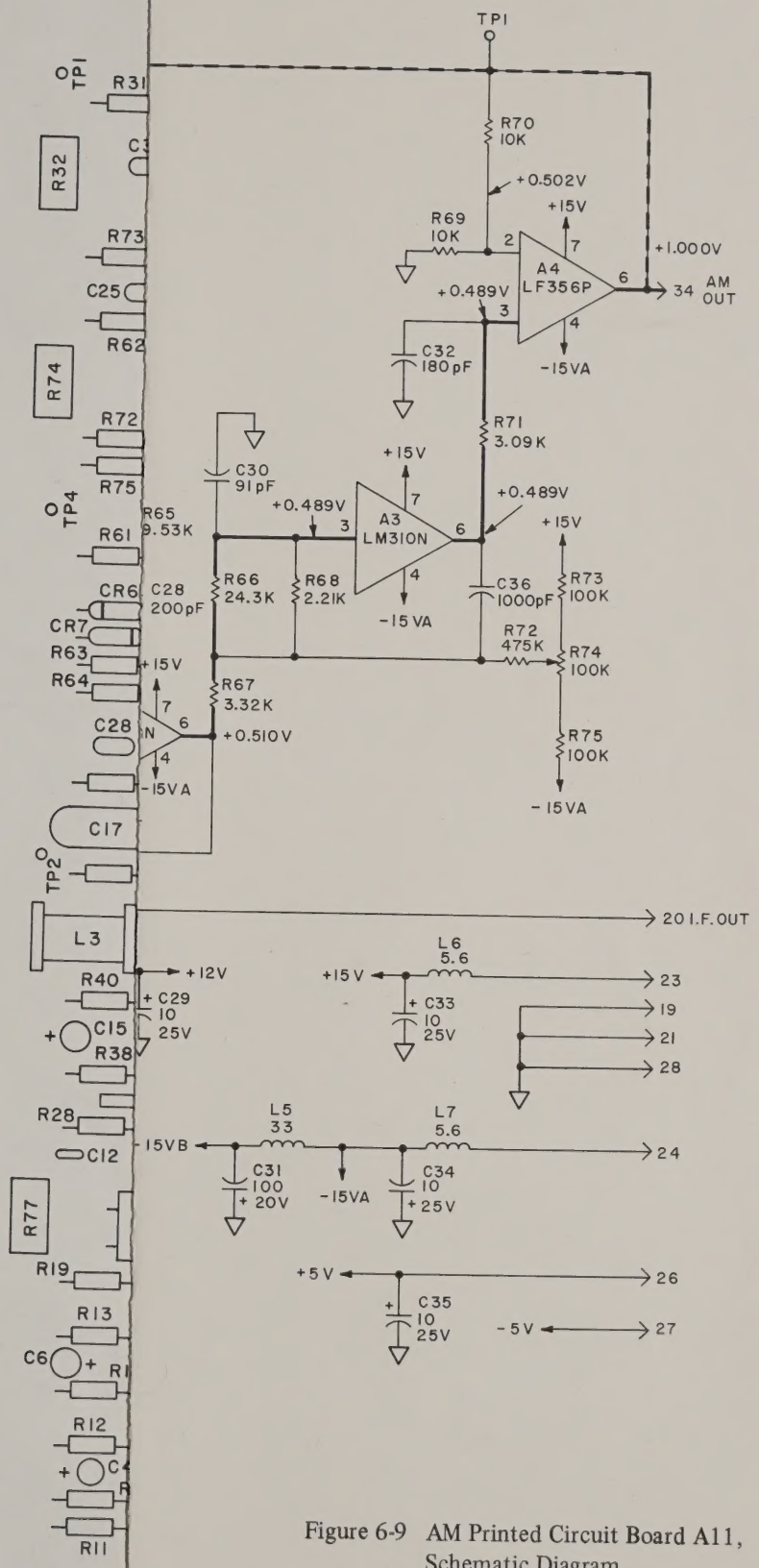


Figure 6-9 AM Printed Circuit Board A11, Schematic Diagram

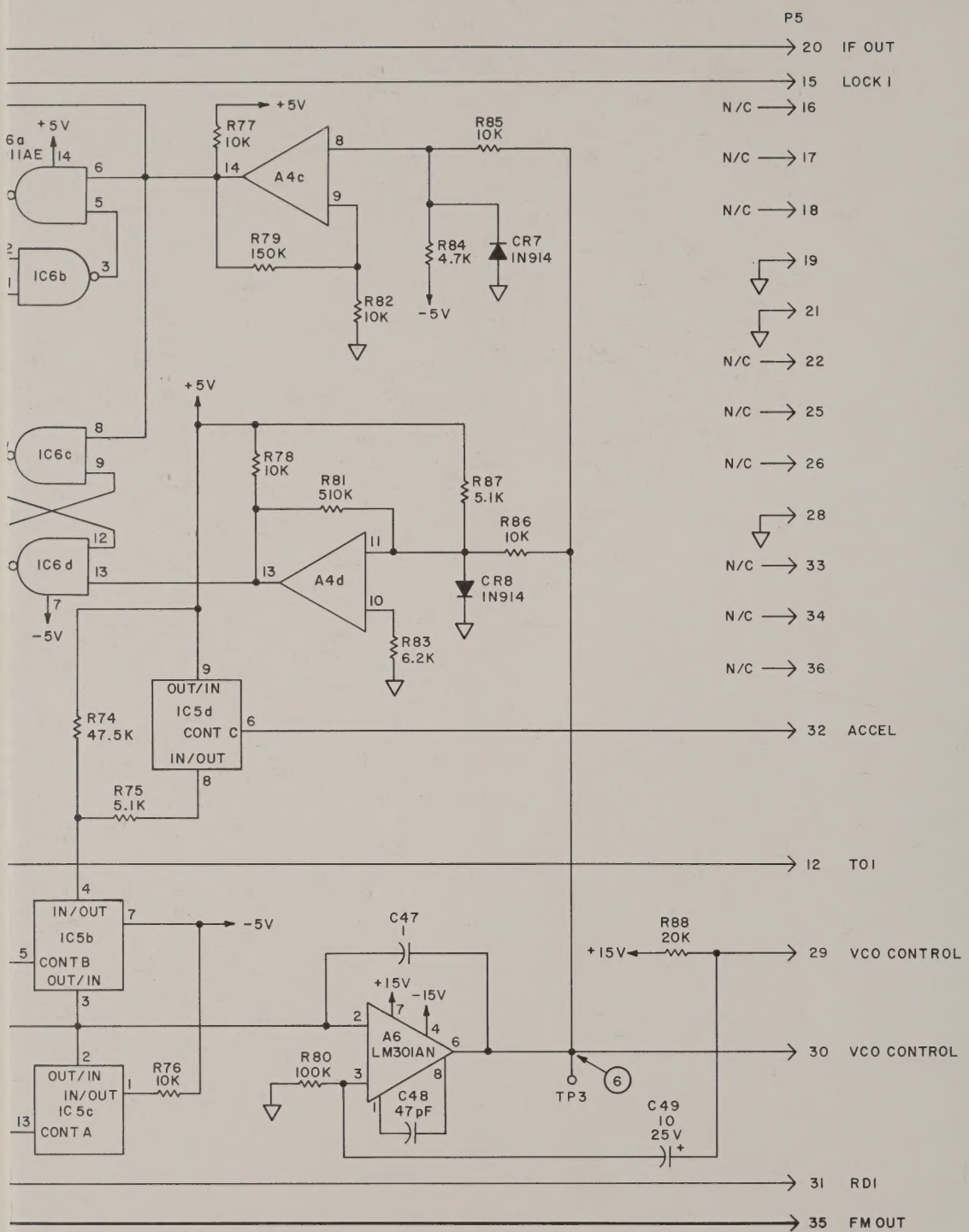
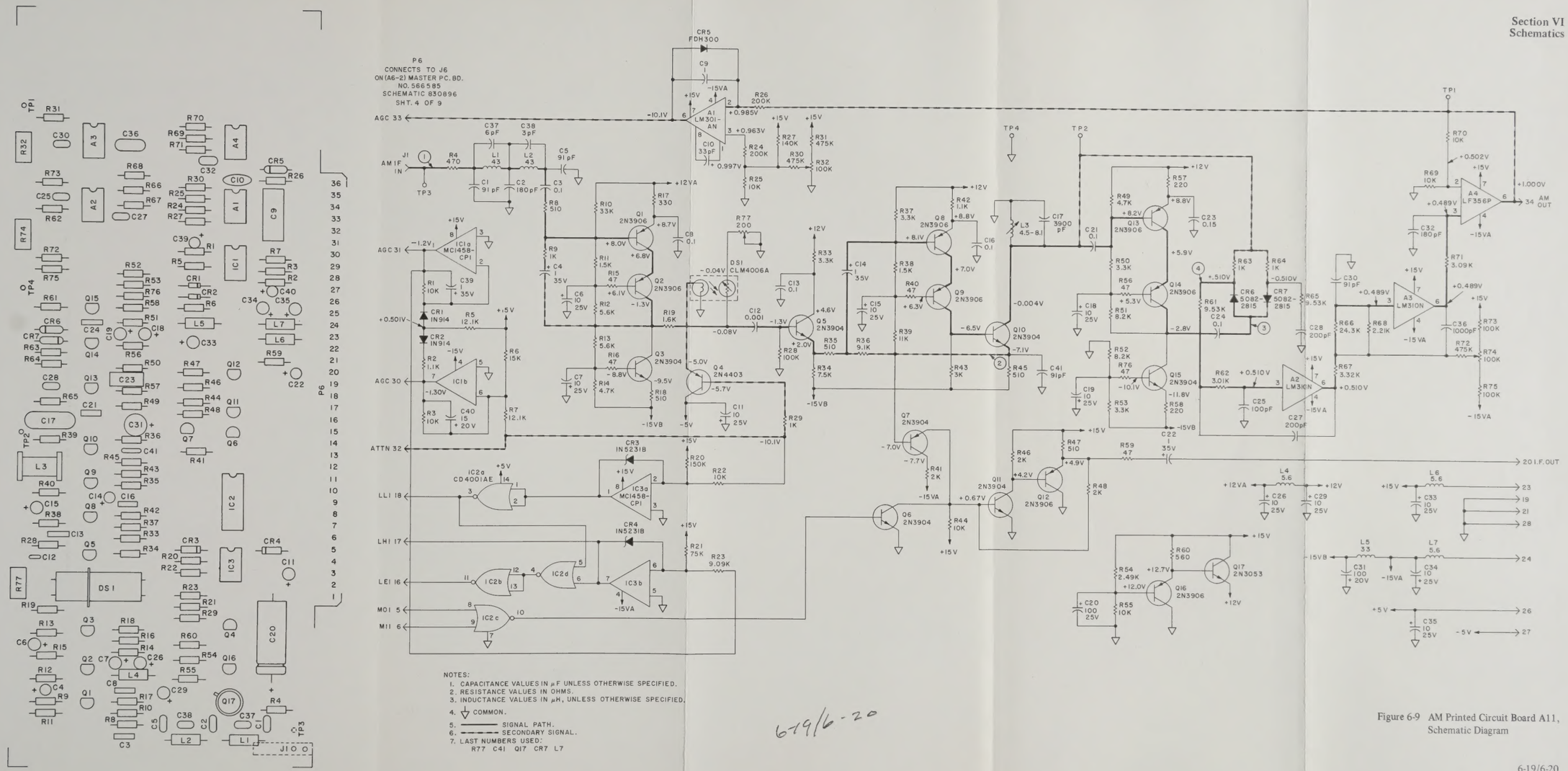


Figure 6-8 FM Printed Circuit Board A10, Schematic Diagram



6-19/6-20

Figure 6-9 AM Printed Circuit Board A11, Schematic Diagram

8.6-9
16-19/6-20